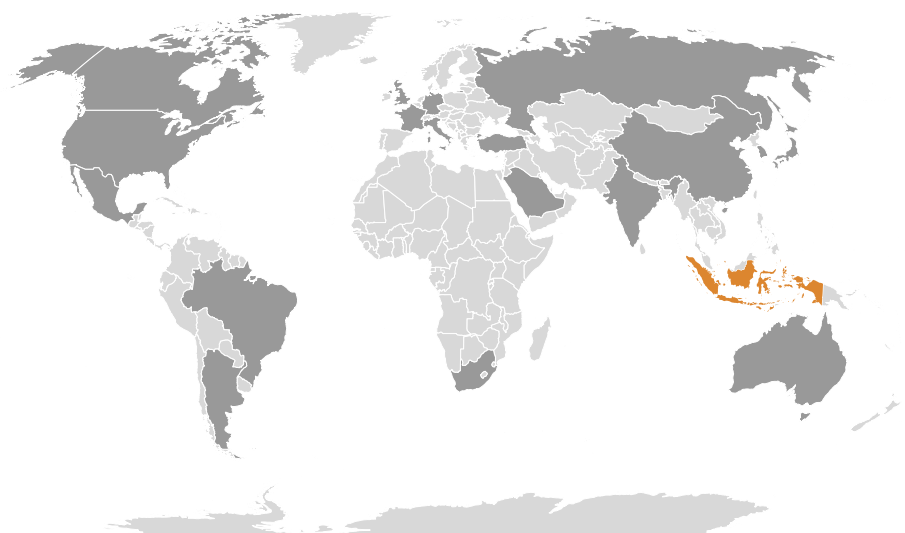




G20 subsidies to oil, gas and coal production: Indonesia

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Argentina
Australia
Brazil
Canada
China
France
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India
▶ **Indonesia**
Italy
Japan
Korea (Republic of)
Mexico
Russia
Saudi Arabia
South Africa
Turkey
United Kingdom
United States

This country study is a background paper for the report **Empty promises: G20 subsidies to oil, gas and coal production** by Oil Change International (OCI) and the Overseas Development Institute (ODI). It builds on research completed for an earlier report **The fossil fuel bailout: G20 subsidies to oil, gas and coal exploration**, published in 2014.

For the purposes of this country study, production subsidies for fossil fuels include: national subsidies, investment by state-owned enterprises, and public finance. **A brief outline of the methodology can be found in this country summary.** The full report provides a more detailed discussion of the methodology used for the country studies and sets out the technical and transparency issues linked to the identification of G20 subsidies to oil, gas and coal production.

The authors welcome feedback on both this country study and the full report to improve the accuracy and transparency of information on G20 government support to fossil fuel production.

A Data Sheet with data sources and further information for Indonesia's production subsidies is available at:
<http://www.odi.org/publications/10075-g20-subsidies-oil-gas-coal-production-indonesia>

priceofoil.org
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Country Study
November 2015

Background

Indonesia holds proven reserves of 3.7 billion barrels of oil, 2.9 trillion cubic metres of gas, and 28 billion tonnes of coal (around 0.2%, 1.5%, and 3.1% of global reserves, respectively), with active exploration and extraction of all three fossil fuels (BP, 2015). However, ageing wells and a lack of significant discoveries has shifted hydrocarbon production patterns in recent years with oil production falling 45%, while gas production increased 67% between 1990 and 2014 (BP, 2015). Nonetheless, in 2014, Indonesia's energy and mineral sector accounted for 25% of state revenue, three quarters of which was from oil and gas (DEN, 2015). This was 14% lower than 2013, reflecting declining oil and gas production and a ban on the export of all raw minerals except for coal.

The past 10 to 15 years have also seen Indonesia become the world's largest coal exporter (World Coal Association, 2014), with an increase in the amount of net exports which grew six-fold from 58 million tonnes in 2000 to 356 million tonnes in 2014 (UN Comtrade Database, 2015). Illegal mining and exports worth up to \$5 billion may have added 50 million to 90 million tonnes to these figures (Sanzillo, 2015). However, a new policy requiring coal miners to prove that they are meeting tax and royalty obligations and to be in possession of a 'clean and clear' certificate, may have limited this activity since late 2014 (Indonesia Investments, 2014).

By the end of the country's 2015–2019 medium-term development plan, oil and gas production is targeted to be 700,000 and 1.3 billion barrels of oil equivalent per day by 2019, respectively; a 15% decrease for oil and 6% increase for gas compared to 2014 production levels (Hasan, 2015).

By 2020, the Indonesian government has set a goal to increase power generation to 76 gigawatts (GW) (from 54 GW at the end of 2014) in a drive to achieve universal electricity access and increase per capita consumption by nearly 50%. To increase capacity alongside replacing existing plants, 35 GW of new power capacity is scheduled to be built, 37% of which are to be gas-fired and 57% coal-fired, more than doubling domestic coal consumption to 200 tonnes per year (Tempo, 2015b; Jakarta Post, 2015).

A new Oil and Gas Act is being negotiated, which is set to pass through parliament between September 2015 and March 2016 and come into force soon after (BusinessReview, 2015). While the text of this new law is still being discussed and finalised, proposals to date indicate that it will redesign the legal framework for oil and gas production, to redirect benefits from international oil companies to domestic companies and consumers. This may have implications for the type and extent of subsidisation of fossil fuels. Key issues likely to be discussed and included in the new Act include:

- giving PT Pertamina (Indonesia's 100% state-owned oil and gas company) a first right of refusal to acquire any new oil and gas blocks offered by the government

- awarding the extension of many of the blocks (Production Sharing Contracts) which are expiring to PT Pertamina, which may also be given a monopoly right to the future development of all oil infrastructure, and most likely a similar right together with PT Perusahaan Gas Negara (PT PGN) for the future development of most of the gas transmission and distribution infrastructure
- further prioritisation of domestic markets over exports with domestic supply prices set centrally by the government (Ministry of Energy and Mineral Resources, 2015; Katadata, 2015).

In addition, a mandatory local content rule is already applied to the procurement of goods and services for oil and gas operations in Indonesia. Compulsory local content was set at 57% in 2013 and 54% in 2014. This can be defined as a subsidy but one that seeks to cluster benefits on domestic producers of goods and services, rather than attempting to incentivise oil and gas production and exploration. This rule is also applied in many other industries in Indonesia.

In recent years, Indonesia has worked hard to phase out consumer subsidies for fossil fuels, which indirectly support fossil fuel production. The majority of consumer subsidies for petrol and diesel have been reformed as of 2015, although the durability of these reforms is questionable following suspended implementation of the new pricing system. Consumer subsidies remain for kerosene, liquefied petroleum gas (LPG) and electricity, although a number of statements have been made indicating the government's intention to reform these subsidies as well. One additional measure that is still in operation is intrinsically linked to fossil fuel producers: the Domestic Market Obligation (DMO). Here, oil, gas and coal producers must, on a compulsory basis, make a portion of their supply available to Indonesian domestic consumers and intermediaries. In the case of oil, the supply is sold at prices significantly below market rates; in the case of gas, it is difficult to determine if the prices deviate from the market; and in the case of coal, prices appear to be benchmarked against a basket of market-based prices, including an international reference price, so it is not clear if any price discrimination exists. According to the Organisation for Economic Co-operation and Development (OECD) (2015), as of 2015 the state-owned oil company PT Pertamina currently pays only 25% of the market price for the crude bought under this scheme. When it sells petroleum products in the domestic market at subsidised prices, it is reimbursed as if it had paid the full market price for the oil. It appears that PT Pertamina is the ultimate beneficiary of this arrangement. The policy is disadvantageous for oil companies, which are prevented from selling their product at a higher, market price.

National subsidies

The Indonesian government's take from oil and gas (the total share of the value of these products that is delivered to the government) is among the highest in the world: it was estimated to average 83% in 2014, excluding the government equity take (Budiman et al., 2014). Nonetheless, it provides some incentives for exploration and production in the oil and gas sector.

A number of tax-related incentives were last quantified at \$245 million in 2008 by Braithwaite et al. (2010). As of 2015, these still appear to be in existence, though insufficient data is available to update these estimates. They include:

- an exemption of import duty and VAT for goods used in oil and gas exploration (MOF Regulation No. 70/PMK.011/2013) (PwC, 2013)
- an investment credit for the capital costs of producers developing certain new fields, if it can be shown that the internal rate of return is lower than for standard investments (Deloitte, 2013; Braithwaite et al., 2010). Historically this has been set at around 17% to 20% for oil producers and 20% to 55% for gas producers (OECD, 2015).

In addition, effective as of 2015, the government introduced an exemption from the Land and Building Tax. This is valid for oil and gas contracts signed after 2010 for projects that are still in the exploration phase, which initially can last up to six years but may be extended to 10 (MOF Regulation 267/PMK.011/2014) (PwC, 2015). Given that figures for the current fiscal year are yet to be released, it is not possible to quantify this subsidy.

Some non-tax incentives also exist but it is difficult to determine if they are subsidies or to quantify them. One arrangement – under the title of ‘cost recovery’ – results in significant transfers from the government to oil and gas producers. As described by Braithwaite et al. (2010), when a project begins commercially producing oil or gas, the state takes ownership of all capital equipment used for production. Then, for every subsequent year of production, the company is treated as a contractor with the state reimbursing (via cost recovery payments) the full

operating costs, together with the full costs for exploration and depreciation associated with those capital assets. The company sells its equity share of the oil and gas produced and pays tax directly on these revenues rather than first deducting its operating costs and capital depreciation costs. Across 2013 and 2014 these cost recovery payments averaged \$16 billion per year. This supports the extraction of fossil fuels, as companies benefit from a reduction in risk as their operating and capital depreciation costs will always be covered by the state. Companies do, however, fully bear the risk of exploration, because the costs of this can only be recovered if exploration is successful and results in production. Insufficient data is available to quantify the subsidy: it would be necessary to understand the additional financial benefit to the company in receiving cost recovery payments instead of deducting them prior to calculating tax payments.

Limited information is available on subsidies for exploration and production in the coal sector. One well reported producer subsidy is the inconsistent royalty rates paid by different kinds of coal producers in Indonesia. For small licences issued at a local level, producers pay royalty rates of between 3% and 7%, while larger companies pay a royalty rate of 13.5%. The government has announced its intention to reform this differential royalty rate but resistance from small mining companies has so far prevented this from taking place (Platts, 2014; Indonesia Investments, 2015). It has not been possible to estimate the value of this subsidy. Further state intervention exists in the power sector related to coal power plant production and guarantees related to transport and export infrastructure, but this is detailed under the subsequent sections on state-owned enterprise (SOE) investment and public finance.

State-owned enterprise investment

PT Pertamina is Indonesia's 100% state-owned oil and gas company with a near monopoly in the midstream and downstream sectors, and influence in upstream oil and gas sectors. It is a mid-sized, though rapidly growing operator in the upstream industry, with domestic and international private companies responsible for the majority of fossil fuel exploration and extraction.

Table 1: Indonesia's national subsidies to fossil fuel production, 2013–2014 (\$ million except where stated otherwise)

Subsidy	Subsidy type	Targeted energy source	Stage	2013 estimate	2014 estimate	Estimated annual amount
Exemption from import duty and VAT for goods used in oil and gas exploration	Tax expenditure	Oil and gas	Exploration	N/A	N/A	N/A
Investment credit allowance	Tax expenditure	Oil and gas	Exploration	N/A	N/A	N/A

Sources and additional data are available in the Data Sheets that accompany each Country Study.

Note: N/A indicates data was not publicly available at the time of publication.

PT Pertamina reported spending \$198 million on exploration in 2014, which may include domestic activities as well as international activities in countries including Algeria, Australia, Iraq, Libya, Malaysia, Qatar, Sudan and Viet Nam (Pertamina, 2015). Additional exploration and production costs are captured within the company's reporting of 'assets under construction' (\$1.9 billion in 2013 and \$2.6 billion in 2014) (Pertamina, 2015: 431) or 'tanks, pipelines and other equipment' (\$4.4 billion in 2013 and \$4.6 billion in 2014) (ibid.). PT Pertamina is reportedly the only company that holds a limited trading licence for crude oil, which runs until 2028 (BPH Migas, n.d.). PT Pertamina also runs more than 1,500 km of gas transmission pipelines, though approximately four times this length (more than 6,100 km) is also operated by the state-owned company PT PGN (PT PGN, 2014; PT Pertamina, 2013).

PT Bukit Asam (Persero) Tbk (hereafter known as PTBA) is the country's (65%) state-owned coal producer and holds both coal and coal-bed methane interests. Like PT Pertamina, it is an operator in the upstream industry, along with domestic and international private companies responsible for the majority of coal exploration and extraction. It is among the 10 largest coal producers in Indonesia.

PTBA's latest annual report notes the existence of exploration and evaluation costs but does not provide estimates of their values (PTBA, 2014a). PTBA is also involved in developing several infrastructure projects that involve the production and distribution of coal and its use in power generation. Although a number of fossil fuel projects have been identified, it was not possible to quantify the investments made by PTBA in 2013 and 2014.

PT Perusahaan Listrik Negara (PLN) is an entirely state-owned company that manages the national electricity industry. It produced 76% of the 216 GWh total domestic production in 2013, purchasing the remaining share from a number of independent power producers (Ministry of Energy and Mineral Resources, 2014). As of December 2014, PT PLN operated more than 5,000 power plants with a combined capacity of 39 GW. Of this, 31 GW are installed in the central island of Java. PT PLN also dominates the transmission and distribution sector with almost 40,000 km of transmission lines and more than 925,000 km of distribution lines.

Fossil fuels are used to generate 91% to 93% of PT PLN's power. In 2014 the company consumed 7.4 billion litres of liquid fuels, 45 million tonnes of coal and more than 450,000 million metric standard cubic feet (MMSCF) of natural gas. The respective contributions of the liquid fuels, coal and gas to total generation were 15%, 48% and 28% (PT PLN, 2015). The company is expected to become even more reliant on fossil fuels as it is responsible for developing a further 10.7 GW of mainly coal-fired power plants by 2024. Of the roughly 52,000 GWh bought from

independent power producers (IPPs) in 2014, about 36,000 GWh came from coal-fired power plants (Ministry of Energy and Mineral Resources, 2014).

Public finance

Domestic

National and state-owned banks are important to the extractive industries in Indonesia, including by facilitating the procurement of goods and services for the oil and gas industry.

It is clear that significant volumes of Indonesian public finance are invested in fossil fuel production but it is difficult to determine specific levels of support. State-owned Bank Mandiri's 2014 annual report stated that the bank 'financed 30% of the national electricity generation development program with a capacity of 2,820 Megawatts' (Mandiri, 2015: 45). News reports also confirm that major state banks, including Bank Mandiri, Bank Nasional Indonesia and Bank Rakyat Indonesia, as well as various regional banks – commonly known as Bank Pembangunan Daerah – and commercial private banks such as Bank Central Asia are involved in supporting energy infrastructure projects in Indonesia (Riau Pos, 2011; Dinas Pertambangan Provinsi Kalimantan Timur, n.d.; TribunNews, n.d.). Despite this active role, no documents were identified detailing the nature of their support to fossil fuel production. Only one transaction, \$87 million of financing from Bank Mandiri for the Medco Senoro gas facility, was identified.

In 2015, Bank Mandiri, Bank Negara Indonesia and Bank Rakyat Indonesia provided a total of nearly \$1 billion in currency hedging coverage for the state-owned electricity distribution company PLN. It is not clear what share of this, if any, could be attributed to the support of fossil fuel-based electricity production. Indonesia's state-owned banks also hold Abandonment and Site Restoration (ASR) funds, which oil producers are required to set aside for future site remediation costs. As of 31 January 2014, the ASR funds deposited in state-owned banks amounted to \$501 million (SKK Migas, 2014b).

The government also provides financing for energy projects. The Indonesia Infrastructure Guarantee Fund (IIGF), established with support from the World Bank, is mandated to provide guarantees for infrastructure projects in Indonesia under the government's public-private partnership scheme and fast-track projects. A notable project related to this assistance is the development of the \$4 billion, 2,000 MW Central Java coal-fired power plant, built by J-Power and Itochu Corporation of Japan and Adaro Power of Indonesia, with finance supported by Sumitomo Mitsui Banking Corporation and the Japan Bank for International Cooperation (JBIC). The IIGF

Table 2: Indonesia's state-owned enterprise (SOE) investment, 2013–2014 (\$ million except where stated otherwise)

Name of SOE	Description	Fossil fuel sector	Value 2013	Value 2014	Annual average amount
Pt Pertamina	Exploration	Oil and gas	N/A	198	198
Pt Pertamina	Assets under construction	Oil and gas	1,900	2,600	2,250
Pt Pertamina	Tanks, pipelines and other equipment	Oil and gas	4,400	4,600	4,500
PT Bukit Asam		Coal	N/A	N/A	
PT PLN		Electricity (91-93% fossil fuel-based)	N/A	N/A	
Totals					
Total (\$ m)					6,948
Total (IDR b)					77,624.55

Sources and additional data are available in the Data Sheets that accompany each Country Study.

Note: N/A indicates data was not publicly available at the time of publication.

Table 3: Indonesia's public finance for fossil fuel production, 2013–2014 (\$ million except where stated otherwise)

Institution name	Coal mining	Coal-fired power	Upstream oil and gas	Oil and gas pipelines, power plants and refineries	Multiple or unspecified fossil fuels	Total fossil fuel finance 2013 & 2014	Annual avg. fossil fuel finance
Domestic							
Bank Mandiri	-	-	87	-	-	87	43.5
Domestic total	-	-	87	-	-	87	43.5
International							
Multilateral development bank share	0.1	46	20	80	-	146	73
International total	0.1	46	20	80	-	146	73
Totals							
Total public finance (\$ m)							116.5
Total public finance (IDR b)							1,301

Sources and additional data are available in the Data Sheets that accompany each Country Study.

awarded this plant a guarantee of \$33.9 million and the World Bank acted as a transaction adviser to help facilitate project planning and tendering (OCI, 2013). As of September 2015, however, this project has still not started due to problems with land acquisition (Reuters Africa, 2015). The IIGF provided a guarantee for a 385 km 'coal railway' in Kalimantan (OCI, 2013).

International

Investments by multilateral development banks (MDB) count towards Indonesia's total public support for fossil fuel production. Indonesia's contributions to the MDBs translate to \$73 million in finance for fossil fuel production

annually. Indonesia also holds 3.4% of the shares in the Asian Infrastructure Investment Bank, a new international financial institution scheduled to begin operations in 2016, with \$100 billion in total capital. The Asian Infrastructure Investment Bank could be a potential source of public finance for fossil fuel production in the future.

Private companies

Private upstream oil and gas companies

In 2014, the top 10 private oil and gas companies in Indonesia spent more than \$12 billion on capital

expenditure; their profitability – as measured by free cash flow – stood at \$4.4 billion. Chevron (US) was Indonesia's largest private upstream oil and gas producer. Multinational corporations from several countries make up most of Indonesia's remaining largest oil and gas producers, including Inpex (Japan), Total (France), ConocoPhillips (US), BP (UK), Repsol (Spain), the Chinese SOE, CNOOC, and ExxonMobil (US).

Private midstream/downstream oil and gas companies

Fossil fuels are processed in Indonesia in six oil refineries, three LNG plants and a methanol refinery. The SOE PT Pertamina owns and operates the oil refineries and the two largest LNG plants with total capacities of more than 1 million barrels per day and nearly 25 million tonnes per year, respectively (PT Pertamina, n.d.). The ownership of the third LNG plant (capacity of 2.1 million tonnes per year) is shared between PT Pertamina (29%), Medco (11%) and Sulawesi LNG Development Ltd. (59%), a cooperation between Mitsubishi Corporation and KOGAS (Donggi Senoro LNG, n.d.). Medco, a private company, operates Indonesia's only methanol plant.

Private coal companies

Coal mining in Indonesia involves a large number of producers, the majority and largest of which are private Indonesian companies that do not appear to operate in other countries. Many producers are subsidiaries of much larger conglomerates and, for clarity, we have therefore only detailed the latter here. The top 10 parent companies in the coal sector accounted for around 261 million tonnes of coal in 2014, more than half of the 458 million tonnes mined that year (BP, 2015).

Private electricity companies (fossil fuel-based)

Private power producers contributed more than 52 TWh to the Indonesian electricity grid in 2014, around 25% of the total (Harian Terbit, 2014; DEN, 2015). However, their share of total generation is set to increase as private companies are tasked with building nearly 26 GW of the new power capacity being developed by 2024 (PT PLN, n.d.; Ministry of Energy and Mineral Resources, 2015). The majority of this new capacity will be powered by fossil fuels, reflecting the overall dominance of fossil fuel-based energy in the government's power expansion plan.

Table 4: Top private upstream oil and gas producers in Indonesia, 2013–2014

Company	Headquarter country	Oil production (million barrels in country)		Gas production (billion cubic metres in country)		Sum of operating expenditure & capital expenditure, including exploration expenditure (\$ million)		Profitability (from country operations, as measured by free cash flow, \$ million)	
		2013	2014	2013	2014	2013	2014	2013	2014
Chevron	United States	128	122	2	2	3,264	3,307	2,211	1,816
Inpex	Japan	22	22	11	11	2,030	1,872	1,210	1,166
Total	France	15	16	8	9	1,443	1,507	679	626
ConocoPhillips	United States	8	7	6	6	834	752	455	504
BP	United Kingdom	3	3	5	5	614	802	473	251
Repsol	Spain	4	4	4	4	357	386	98	78
CNOOC	China	10	9	2	2	996	1,130	6	-53
ExxonMobil	United States	6	6	2	2	1,354	1,473	18	-128
Energi Mega Persada	Indonesia	5	5	2	2	415	493	111	130
MedcoEnergi	Indonesia	8	8	2	1	422	351	41	4

Source: Rystad Energy, 2015.

Table 5: Top 10 private coal producers by production and profit in Indonesia, 2013–2014

Parent company	Number of subsidiary producers	Production (million tonnes)		EBITDA* (\$ million)	
		2013	2014	2013	2014
PT Bumi Resources Tbk	24	82	85	245	624
Adaro Indonesia, Tbk	0	52	56	822	877
Kideco Jaya Agung	0	37	40	464	329
PT INCO Tembagaraya Megah Tbk	>2	29	29	484	408
Berau Coal	0	23	24	1,425**	1,367**
PT Harum Energy Tbk	4	7	11	91***	32***
PT Golden Mines Tbk	6	5	6	-	-
Pesona Khatulistiwa Nusantara	0	3	4	-	-
Mandiri Intiperkasa	0	3	3	-	-
PT Resource Alam Indonesia	7	4	3	-	14

Source: Ministry of Energy and Mineral Resources, n.d.; PTBA, 2015.

Note: * Unless stated otherwise. EBITDA: Earnings before interest, taxes, depreciation and amortisation; ** Total revenue; *** Gross profit.

Methodology

(for detailed methodology see Chapter 3 of main report)

This report compiles publicly available information on G20 subsidies to oil, gas and coal production across G20 countries in 2013 and 2014. It provides a baseline to track progress on the phase-out of such subsidies as part of a wider global energy transition. It uses the following terms and their definitions.

Production subsidies

Government support for fossil fuel production. For the purpose of this country study, production subsidies include national subsidies, investment by state-owned enterprises (SOEs) (domestic and international) and public finance (domestic and international) specifically for fossil fuel production.

Fossil fuel production

Production in the oil, gas and coal sectors. This includes access, exploration and appraisal, development, extraction, preparation, transport, plant construction and operation, distribution and decommissioning. Although subsidies for the consumption of fossil fuels can support their production, this report excludes such subsidies as well as subsidies for the consumption of fossil fuel-based electricity.

National subsidies

Direct spending, tax and duty exemptions and other mechanisms (such as forms of capacity markets) provided by national and sub-national governments to support fossil fuel production. Normally, the value assigned for a national subsidy is the number provided by the government's own sources, by the OECD, or by an independent research institution.

State-owned enterprise (SOE) investment

A SOE is a legal entity created by a government to undertake commercial activities on its behalf. SOEs can be wholly or partially owned by governments.

It is difficult to identify the specific component of SOE investment that constitutes a subsidy, given the limited publicly available information on government transfers to SOEs (and vice-versa), and on the distribution of investment within their vertically integrated structures. Therefore, this report provides data on total investment by SOEs in fossil fuel production (where this information is available from the company), which are presented separately from national subsidies.

For the purpose of this report, 100% of the support provided to fossil fuel production through domestic and international investment by an SOE is considered when a government holds >50% of the shares.

Public finance

Public finance includes the provision of grants, equity, loans, guarantees and insurance by majority government-owned financial institutions for domestic and international fossil fuel production. Public finance is provided through institutions such as national and multilateral development banks, export credit agencies and domestic banks that are majority state-owned.

The transparency of investment data for public finance institutions varies. Assessing the portion of total financing that constitutes a subsidy requires detailed information on the financing terms, the portion of finance that is based directly on public resources (rather than raised on capital markets) or that depends on the institutions' government-linked credit rating. Few of the institutions assessed allow public access to this information. Therefore, we report the total value of public finance from majority government-owned financial institutions for fossil fuel production separately from 'national subsidy' estimates.

For the purpose of this report, 100% of the support provided to fossil fuel production through domestic and international financing is considered when a government holds >50% of the shares in the bank or financial institution.

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