



Extractive Industries  
Transparency Initiative

# **Subsidies at What Cost? Shedding Light on State Support for Fossil Fuel Consumption**

POLICY BRIEF





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# Understanding the full cost of state support for fossil fuel consumption

USD 5.2 tr

*Estimated  
value of fossil  
fuel subsidies  
in 2017*

Many governments subsidise the production and consumption of fossil fuels in their domestic markets. Subsidies can take the form of direct or indirect financial contributions by a government to fossil fuel companies. They support the cost of production of oil, natural gas or coal, reducing the prices paid for these commodities by domestic consumers.

The scale of subsidies is substantial. According to the IMF, fossil fuel subsidies amounted to an estimated USD 5.2 trillion or 6.5% of global GDP in 2017.<sup>1</sup> At this level, subsidies can slow down efforts to reduce carbon emissions by keeping the cost of fossil fuels low and making it more difficult for cleaner sources of energy to compete.

At least 20 countries have made commitments to reform subsidies under the Paris Agreement on climate action.<sup>2</sup> With increasing public attention on carbon emissions and the energy transition, understanding the full cost of state support for fossil fuel consumption is critical for the public's oversight of government efforts to curb pollution.

Yet it can be challenging to account for the actual costs of fossil fuel production and consumption. Subsidies may be covered by budget allocations, where their full cost is recorded in the national budget. In many cases however, subsidies are funded separately, often through state-owned enterprises (SOEs), or through other policy instruments.

Recognising these challenges, the EITI Standard requires the publication of information on subsidies related to extractive commodities that are not recorded in national budgets. Subsidies provided by SOEs without compensation from governments and outside of the national budgetary process are categorised as quasi-fiscal expenditures. The EITI Standard requires a level of transparency and accountability in these off-budget activities that is equal to that of conventional government budgetary spending. Some countries have gone beyond EITI requirements to provide information on other subsidies, such as direct or indirect support to the extractive industry.

Disclosures and public debate around fossil fuel subsidies are important for citizens to understand the trade-offs associated with government strategies related to the fossil fuel industry, and the impacts of those trade-offs on public finances and carbon emissions. In an energy transition scenario that reduces the profit margins on extractive projects, the cost of fossil fuel subsidies may increase as a share of the profits of SOEs, thereby becoming more challenging to sustain over time.

This brief outlines the different types of fossil fuel subsidies, the EITI's requirements on quasi-fiscal subsidies and examples of related disclosures from EITI implementing countries.

# Types of fossil fuel subsidies

There are broadly three types of fossil fuel subsidies:



## 1. Producer subsidies

Producers receive either direct or indirect government support through, for example, receiving higher-than-market prices for their output, paying lower-than-market prices for their inputs, receiving direct financial transfers from the government budget, expenditures by SOEs, government expenditure on fossil fuel infrastructure or tax breaks or other incentives for investment/production.

*A typical example is when a government provides tax incentives (either tax holidays or reduced tax rates) to fossil fuel producers, which allows them to sell fossil fuels at a lower price.*



## 2. Pre-tax consumer subsidies

Consumers pay below-market prices for goods. The market price for internationally-traded goods (such as oil and natural gas) is often calculated using the international market price for such commodities, and adjusted for transport and distribution costs.

*A typical example is when governments provide subsidised petroleum products (such as gasoline) to the domestic market, or when governments provide subsidised crude oil, natural gas or coal to power plants, which produce electricity for the domestic market.*



## 3. Post-tax consumer subsidies

The provision of goods at a price below supply costs and “efficient levels of taxation”. Efficient taxation is based on the idea that all goods, including energy, should be taxed in the same way and that the rate of taxation should reflect any adverse impacts on the broader society and environment (“externalities”), such as local pollution, traffic congestion and global warming.

*A typical example is a rate of taxation that does not fully account for the cost of externalities such as air pollution and global warming.*

# Fossil fuel subsidies



## Producer subsidies

- ✓ Direct **financial support** for producers
- ✓ **Credit support**
- ✓ **Insurance indemnification**
- ✓ No or low charge for **mineral leases** on government land
- ✓ Preferential treatment in **government procurement**
- ✓ **Tax breaks** and special taxes



## Pre-tax consumer subsidies

- ✓ Direct **financial support** for consumers
- ✓ **Regulated prices** (below market rates)
- ✓ Use of government **goods or services** at below market rates



## Post-tax consumer subsidies

- ✓ Taxes that do not account for “**externalities**” (e.g. environmental impacts)
- ✓ Regulatory **loopholes**

Institutions have different methodologies for defining and accounting for subsidies.<sup>3</sup> While the World Trade Organization (WTO), the Organisation for Economic Co-operation and Development (OECD) and the International Energy Agency (IEA) limit their definition of subsidies to the first two types listed above, the International Monetary Fund (IMF) adopts a broader definition that also encompasses the third type.<sup>4</sup>

# Common myths about fossil fuel subsidies

Myth	Response
<b>Fossil fuel subsidies primarily benefit low-income households and citizens.</b>	<p>Fossil fuel subsidies benefit the heaviest users of fossil fuels the most. While low-income households may use fossil fuels, many of the heaviest users are likely to be industrial or higher-income consumers.</p> <p>Research from the IMF<sup>5</sup> and the World Bank<sup>6</sup> indicates that the richest 20% of the population benefits six times more from fuel subsidies than the poorest 20% of the population. Targeted cash transfers to the least affluent can be a more effective tool for poverty alleviation.</p>
<b>If subsidies are not part of a country's budget process, they do not need to be disclosed.</b>	<p>Subsidies are payments made on behalf of citizens, using public funds. They should therefore be subject to the same scrutiny as other types of government spending. They are as vulnerable to corruption as other types of payments, particularly where they are not planned for through the government's budget process.</p>
<b>Subsidies only matter if commodity prices are high.</b>	<p>Subsidies may be curtailed at a low political cost in periods of low commodity prices, since consumers are not impacted to the same degree by energy costs. However, subsidies may be re-introduced when commodity prices increase.</p>
<b>Subsidies are too technical and complex to explain.</b>	<p>The scale of subsidies alone justifies the need for their disclosure. Information on subsidies is of key public interest, since subsidies, like other forms of government spending, involve trade-offs between different beneficiaries. Information on the scale of these subsidies can support dialogue and policies pertaining to a country's transition to renewable energy sources.</p>

# Requirements of the EITI Standard

Transparency of the actual costs of fossil fuel subsidies is vital to help understand the full scope of state support for their use. Yet in many resource-rich countries, reporting on subsidies has been inconsistent.

The EITI Standard includes reporting requirements to improve the traceability of extractive revenues that are not recorded in the state's national budget. It adopts the same definition of quasi-fiscal expenditures as the IMF, bringing disclosure of subsidies into the scope of EITI reporting.

The EITI Standard does not strictly require disclosure of all types of fossil fuel subsidies described above. Rather, it focuses on those subsidies that are associated with expenditures by SOEs or that are a feature of the legal and contractual regime. Post-tax consumer subsidies are not strictly required to be disclosed by the EITI Standard.

## **Requirement 6.2 of the EITI Standard:**

Where state participation in the extractive industries gives rise to material revenue payments, implementing countries must include disclosures from SOEs on their quasi-fiscal expenditures.

The multi-stakeholder group is required to develop a reporting process with a view to achieving a level of transparency commensurate with other payments and revenue streams, and should include SOE subsidiaries and joint ventures.

Quasi-fiscal expenditures include arrangements whereby SOEs undertake public social expenditure such as payments for social services, public infrastructure, fuel subsidies and national debt servicing, etc. outside of the national budgetary process.

Implementing countries and multi-stakeholder groups may wish to take the IMF's definition of quasi-fiscal expenditures into account when considering whether expenditures are considered quasi-fiscal.

The EITI Standard also requires information on other forms of direct and indirect state support for fossil fuels, including:

- Any loans or guarantees provided by the state or SOEs (Requirement 2.6)
- The scope of tax incentives and exemptions as part of the review of the fiscal regime (Requirement 2.1)
- The scope of tax incentives and exemptions as an integral part of contract disclosure (Requirement 2.4).

This information can be used together with data on quasi-fiscal expenditures and subsidies to provide a full picture of state support for fossil fuel extraction and consumption.

# Transparency in action

Several EITI implementing countries have reported off-budget subsidies related to fossil fuels. Validations under the EITI Standard have highlighted weaknesses in public disclosures of these types of quasi-fiscal expenditures, although a growing number of countries have started disclosing these types of subsidies as part of their reporting in accordance with EITI Requirement 6.2. The attention of multi-stakeholder groups has increasingly focused on correctly identifying and quantifying these quasi-fiscal expenditures.



Moho Nord Deep Offshore Oil Project,  
Republic Of Congo

CREDIT: TOTAL



100%

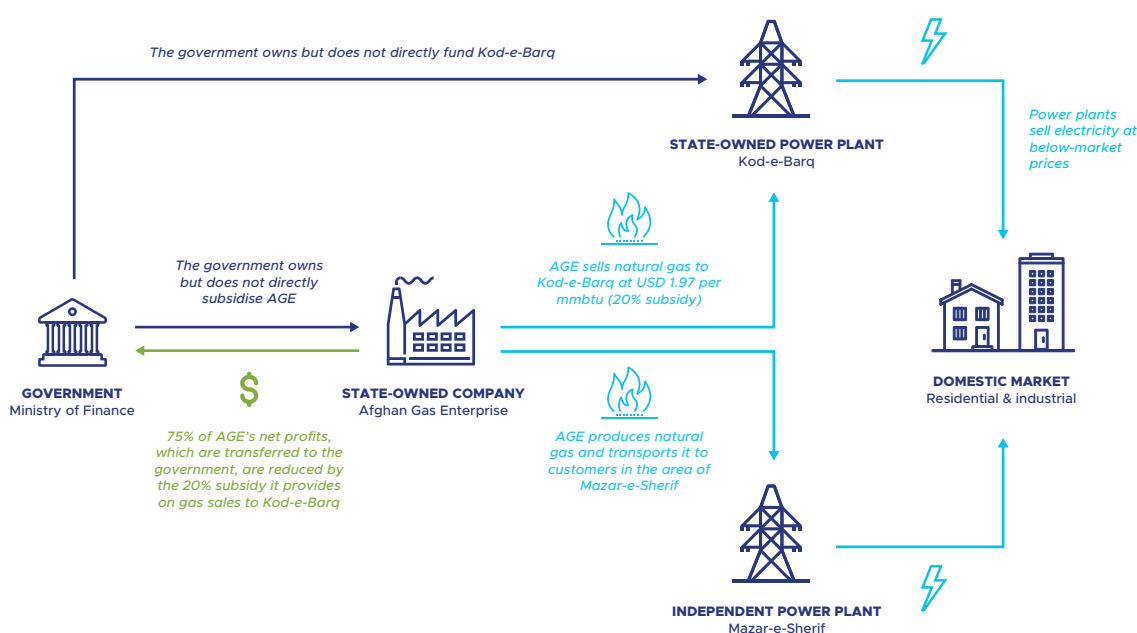
of Afghanistan's  
natural gas is  
produced by  
Afghan Gas  
Enterprise

## Counting the cost of natural gas subsidies to power plants

Government-owned Afghan Gas Enterprise (AGE) accounts for 100% of Afghanistan's natural gas production. It supplies 95% of its natural gas to a state-owned fertiliser and power plant, Kod-e-Barq. In June 2020, the AGE also signed a 20-year agreement with a new independent power producer, Mazar-e-Sharif.

The natural gas sold by AGE to the Kod-e-Barq plant is below a domestic market and profit-generating price. It is also lower than the price of natural gas to be supplied to Mazar-e-Sharif plant. AGE receives no compensation from the government budget for the cost of these subsidies.

**Figure 1: Subsidies on Afghan Gas Enterprise's natural gas supplies to power plants in Afghanistan**



Afghanistan has recently used its EITI reporting<sup>8</sup> to identify and put a valuation on the cost of off-budget subsidies provided by AGE on its supplies of natural gas to the Kod-e-Barq plant. Although there is no domestic spot market for natural gas in Afghanistan, the country's multi-stakeholder group has considered using the unit price for natural gas set in AGE's agreement with Mazar-e-Sharif for Afghanistan's domestic market as well.

The multi-stakeholder group has calculated the value of subsidies on gas supplies to Kod-e-Barq by estimating the price discount of these sales compared to the market price of gas sales to Mazar-e-Sharif.



70%

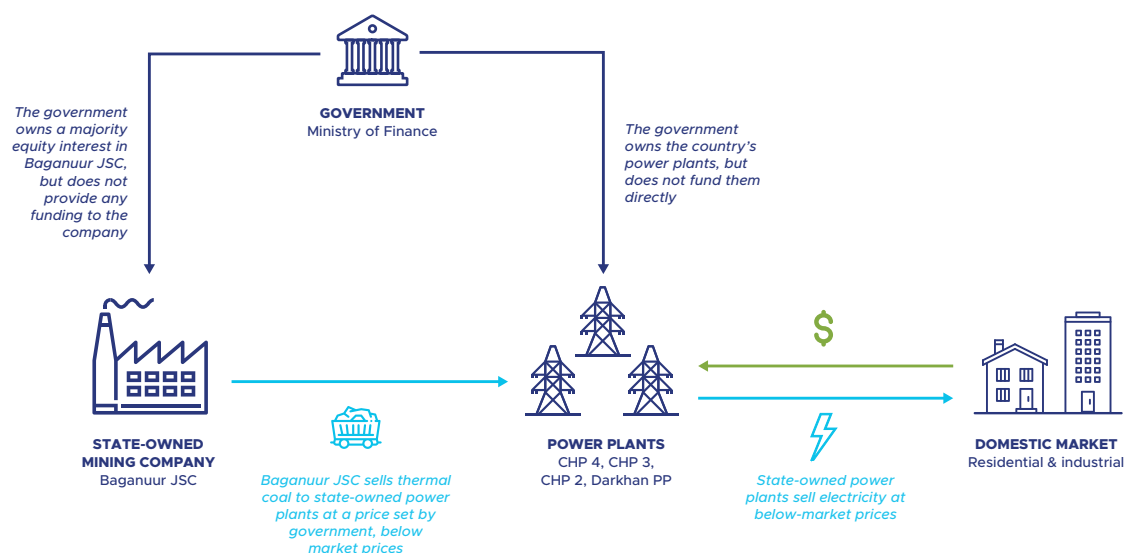
of thermal  
coal required  
by Mongolia's  
power plants  
is provided by  
Baganuur JSC

## Calculating discounts on thermal coal supplies to domestic power plants

In Mongolia, the majority state-owned coal producer Baganuur JSC sells thermal coal to state-owned power plants for below-market prices. This accounts for around 70% of the thermal coal required by the state-owned power plants.

The price for these exchanges is regulated and periodically adjusted by the government. The government does not compensate Baganuur JSC for the foregone revenues due to these regulated prices. Thus, the cost of these subsidies to power plants is not recorded in the national government budget.

**Figure 2: Subsidies on Baganuur JSC's thermal coal supplies to power plants in Mongolia**



Mongolia's EITI reporting<sup>8</sup> has provided valuations of subsidies on Baganuur's thermal coal sales to power plants. By calculating the discount in the unit price of thermal coal sales to the power plants, and by comparing these to prevailing market prices for Mongolian coal exports, EITI disclosures have enabled oversight of both the unit cost and total value of these off-budget coal subsidies. This data can provide insight to policy makers assessing options for the future of such subsidies.



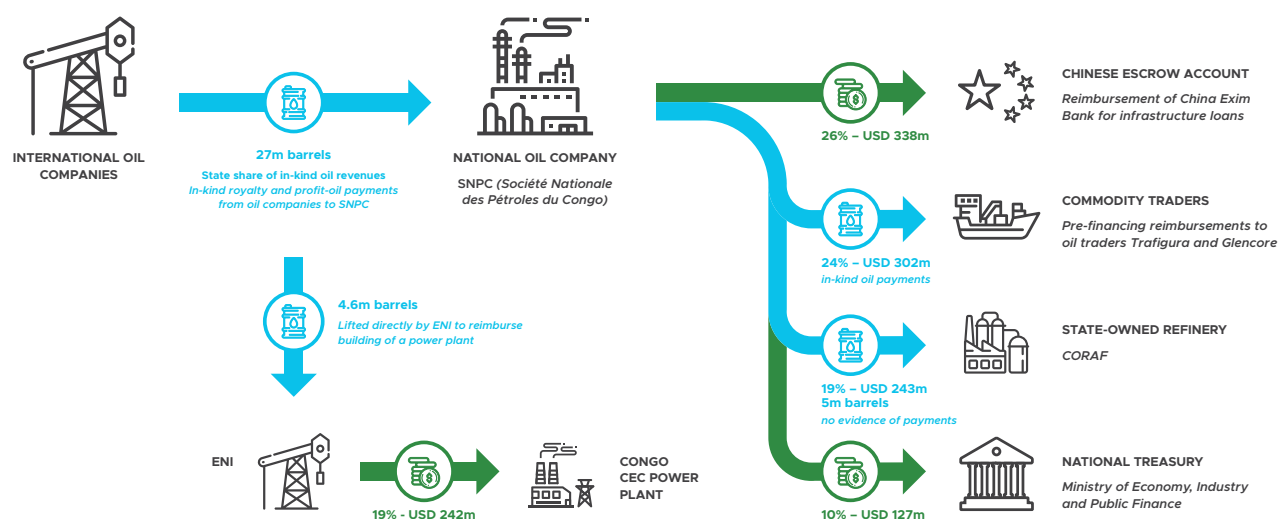
## Accounting for transfers of crude oil to the domestic refinery

The Republic of Congo's national oil company, SNPC, deducts a share of the state's in-kind oil revenues, which it transfers to its domestic refinery (CORAF). These transfers are made as per an agreement between the government and CORAF, which require payments for crude oil supplies within 90 days of delivery. Yet there is no evidence of CORAF issuing payments for these transfers since 2013. In total, between 5 million and 6 million barrels of crude oil have been supplied to the CORAF refinery annually.

# 5 to 6

million barrels of crude oil have been supplied to the CORAF refinery annually

**Figure 3: Delivery of crude oil supplies to the domestic refinery (CORAF) in 2017**



Source: EITI International Secretariat diagram based on the Republic of Congo's 2017 EITI Report.

The Republic of Congo's EITI reporting<sup>9</sup> has identified these transfers of crude oil to CORAF, without evidence of payment to the government treasury for these supplies. The country's multi-stakeholder group recognised these unpaid arrears as a "de facto subsidy", but also considers them to be debts to the state rather than a form of subsidy to the refinery. However, the terms of the debt to the state remain unclear. Should the terms of the refinery's debt to the state be preferential to prevailing market rates, it could be argued that the refinery's debt to the state represents a form of subsidy. This support for the national refinery is recognised in the Republic of Congo's EITI Validations, where they are categorised as a quasi-fiscal expenditures.

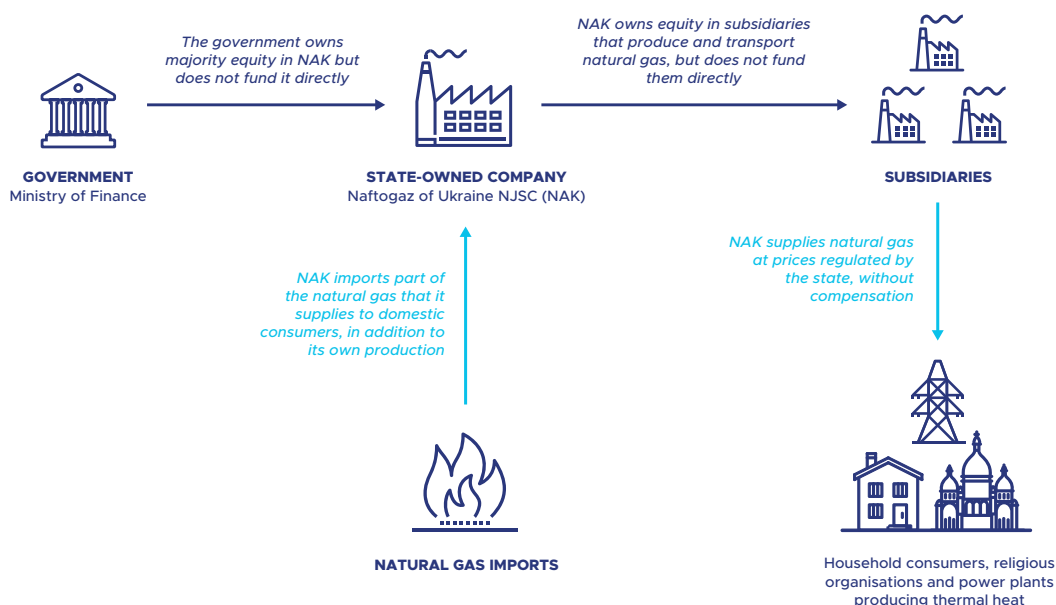


## Publishing details of subsidies via domestic power plants to three consumer groups

In Ukraine, government-owned Naftogaz of Ukraine NJSC (NAK) supplies natural gas to power plants that produce thermal heat for domestic consumers at below-market prices. Under a 2015 law, natural gas is sold domestically at market prices, with the exception of sales to households, religious organisations and thermal heat and electricity producers.

The price of natural gas supplied to these three types of consumers are regulated by separate laws, which set prices below the prevailing domestic market prices for natural gas. NAK does not receive compensation from the government for the foregone revenue related to these subsidised sales.

**Figure 4: Subsidies on Naftogaz of Ukraine NJSC's natural gas supplies to specific consumers**



EITI reporting in Ukraine<sup>10</sup> has identified and valued the quasi-fiscal expenditures (including subsidies) carried out by state-owned enterprises. Ukraine's multi-stakeholder group has used the price paid by NAK for the purchase of imported natural gas as a proxy for a market price for natural gas. Based on this proxy, the multi-stakeholder group has calculated the cost of the subsidy as the difference between NAK's natural gas price for thermal energy companies and the cost of imported natural gas, enabling debate on the future of these payments.



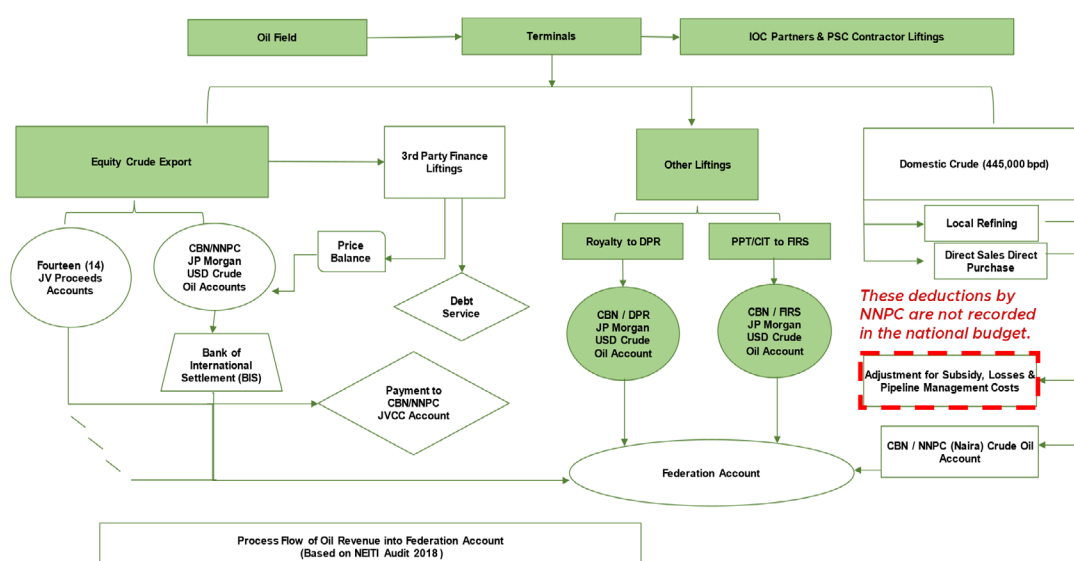
## Visualising the process for government subsidies to consumers of petroleum products

Nigeria's national oil company, NNPC, provides a subsidy on refined petroleum products sold to the domestic market, at a price set by the government. NNPC receives some government compensation for these subsidies, but not enough to cover their full cost.

In 2018, NNPC deducted a portion of the revenues from its domestic crude oil sales to cover the cost of the fuel subsidies that is not reimbursed by the government budget. These deductions took place prior to remittance of the sales proceeds to the government, and were therefore not recorded in the national budget.

*A portion of NNPC's revenues is deducted from its crude oil sales to cover subsidy costs*

**Figure 5: Overview of crude oil revenue flows to the government and deductions by NNPC to cover subsidies**



Source: Nigeria's 2018 Oil & Gas EITI Report, [eti.org/document/2018-nigeria-oil-gas-report](https://eti.org/document/2018-nigeria-oil-gas-report), p.35.

Nigeria's EITI reporting<sup>11</sup> has been used to identify and calculate the cost of subsidies not recorded in the government budget, which the Nigeria EITI multi-stakeholder group has categorised as quasi-fiscal expenditures. Nigeria EITI have calculated the difference between the full cost of subsidies borne by NNPC and the value of compensation received from the government budget. A visual representation of this assessment was used to support understanding of the nature and full cost of this subsidy. The future of these payments is the subject of public debate in Nigeria.

# Publication and use of fossil fuel subsidy data

## GOING BEYOND THE EITI STANDARD

### Germany

#### Using data to inform responsible energy transition

Coal production in Germany is no longer competitive due to high production costs, and the sector has relied on government subsidies. In 2007, the government decided to phase out subsidies by the end of 2018, in a socially responsible manner.

The EITI in Germany reported data on direct government subsidies to the extractive sector, which are recorded in the national budget. EITI reporting has shown that subsidies to the coal sector totalled nearly EUR 1.3 billion in 2016 and EUR 1.05 billion in 2017, compared to total gross government revenue from the extractive sector of less than EUR 500 million a year.

Even though these subsidies are recorded in Germany's national budget, data on the extent of the subsidies is relevant for EITI reporting. It supports public debate on the continuation of coal production in light of the country's progressive climate change agenda.

## Looking ahead

EITI reporting of quasi-fiscal fossil fuel subsidies has focused on supplies of thermal coal and natural gas to domestic power plants, crude oil to domestic refineries, and refined petroleum to domestic markets.

There are opportunities to broaden reporting of disclosures on loans and loan guarantees on fossil fuel projects, as well as on tax incentives and exemptions related to fossil fuel producers. As EITI implementing countries expand their EITI reporting to cover state support for fossil fuel producers and consumers, they can engage in peer-learning with other countries and partners on the methodologies for quantifying and reporting on these subsidies.

The EITI's guidance on implementing EITI Requirement 6.2 outlines detailed steps for multi-stakeholder groups to identify and comprehensively disclose quasi-fiscal expenditures, including subsidies that are not recorded in national government budgets.<sup>12</sup> The country case studies in this brief show how this information can be used in a range of countries and cases to further public debate on the future of these payments.



A surface mine in North  
Rhine-Westphalia, Germany.

CREDIT: UEBERFORM

# Endnotes

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