











REPORT

# SWEPT UNDER THE RUG: How G7 Nations Conceal Public Financing for Coal Around the World

MAY 2016 R: 16-05-B

#### ACKNOWLEDGMENTS

Written by Han Chen, Alex Doukas, Sebastien Godinot, Jake Schmidt, and Sarah Lyn Vollmer.

Data compiled by Elizabeth Bast, Han Chen, Alex Doukas, Jake Schmidt, and Sarah Lyn Vollmer, with contributions from Ken Bossong.

The authors are grateful for feedback from the following reviewers, particularly for feedback on the data used in the report: Alvin Lin and Josh Axelrod from the Natural Resources Defense Council, Shelagh Whitley of the Overseas Development Institute, and Laura Merrill of the Global Subsidies Initiative, International Institute for Sustainable Development.

The authors attempted to contact each institution referenced in this report that has financed coal projects since the previous report, which was published in 2015. We appreciate the feedback received from the institutions.



The Natural Resources Defense Council is an international nonprofit environmental organization with more than 2.4 million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Montana, and Beijing. Visit us at nrdc.org.



**Oil Change International** is a research, communications, and advocacy organization focused on exposing the true costs of fossil fuels and facilitating the coming transition toward clean energy. Oil Change International, 714 G Street S.E., Washington, D.C. 20003, www.priceofoil.org.



**World Wide Fund for Nature**'s mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. WWF European Policy Office, 168 Avenue de Tervurenlaan, Box 20 1150 Brussels, Belgium, www.wwf.eu.



Kiko Network, a Japanese non-profit environmental organization, conducts policy research, advocacy, communication and networking with experts and NGOs to tackle with climate change. Kiko Network, #305 Takakura Bldg. Takakura-dori, Shijo-agaru, Nakagyo-ku, Kyoto 604-8124, JAPAN, www.kikonet.org.



Japan Center for a Sustainable Environment and Society (JACSES) was established in 1993 as an independent, nonprofit policy research organization that promotes the realization of an environmentally sustainable and socially equitable society in Japan and throughout the world. The head office is: 401 Sanshin Bldg. 2-3-2 Iidabashi Chiyoda-ku Tokyo 102-0072 Japan, http://www.jacses.org/en.



**FoE Japan** tackles problems such as global warming, deforestation, and development finance. As a member of Friends of the Earth International, we have worked in Japan since 1980. Our ultimate goal is the creation of a world in which all people may live peacefully and equitably. FoE Japan, 1-21-9 Komone, Itabashi-ku, Tokyo 173-0037, JAPAN http://www.foejapan.org.

NRDC Chief Communications Officer: Lisa Benenson NRDC Deputy Directors of Communications: Michelle Egan and Lisa Goffredi NRDC Policy Editor: Mary Annaïse Heglar Design and Production: www.suerossi.com

© Natural Resources Defense Council 2016

In December 2015, more than 190 nations met in Paris for the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21). The conference produced the Paris Agreement, with countries committing to limit the average global temperature rise to 2 degrees Celsius, and to make best efforts to limit the increase to 1.5 degrees.<sup>1</sup> Unfortunately, continued government financing for international coal projects undermines the Paris Agreement. Coal accounts for two-fifths of global energy-related carbon emissions—more than the contributions from oil or gas.<sup>2</sup> Governments must limit future fossil fuel projects, beginning with coal, in order to address climate change.

The contradiction between countries' climate commitments under the Paris Agreement and continued support for fossil fuel use is glaring. We need to shift international public finance for coal toward smarter, sustainable options. Continued coal financing by the Group of Seven (G7) countries is aimed largely at emerging economies and has multiple negative impacts. For example, it locks recipient countries into decades of coal use, increasing environmental and health impacts and the likelihood of owning stranded assets that will not be utilized under future, more restrictive climate and environmental regimes. The use of export credits means that businesses from G7 countries will be the beneficiaries of these coal investments, leaving emerging economies with the financial, health, and environmental impacts. Even worse, G7 nations are trying to sweep under the rug the financing they provide through national export credit agencies and other institutions, as these entities provide very limited public disclosure of the coal projects they finance.

This report is based on data on the G7 countries' financing for coal-related projects (G7 countries include Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States). Here are the main findings of the report:

- From 2007 to 2015, G7 countries have provided more than \$42 billion for coal in the form of direct finance, guarantees, technical assistance, and aid for coal power, coal mining, and related projects.
- Japan, which will host the 2016 G7 meeting, continues to be the worst G7 offender when it comes to public financing for coal projects, providing \$22 billion from 2007 to 2015. Germany comes in second, providing \$9 billion during the same period.
- In 2015 alone, G7 countries provided \$2.5 billion for coal finance—despite new commitments to limit export credits for coal finance.

 Japan not only financed \$1.4 billion in coal projects in 2015 but is considering nearly \$10 billion in future coal projects, a figure that is likely an underestimation since it is based mostly on publicly available data.

Several multilateral banks and the export credit agencies for countries in the Organisation for Economic Co-operation and Development (OECD) have pledged to restrict funding for coal plants and other, related activities. Even so, new publicly funded coal projects still loom on the horizon. These funding mechanisms unfairly favor the use of coal over clean energy and impede the transition to a lowcarbon economy. Given the grave climate risks and health impacts linked to coal use, it is time to end financing for coal projects.

To address climate change and improve transparency, we offer the following recommendations:

- End international public financing for fossil fuels, beginning with coal power plants. G7 governments need to strengthen the OECD agreement and immediately end all international public financing for coal power plants, except for very rare circumstances in which no other option is available to provide immediate energy access in low-income communities.
- G7 governments must limit funding for all coalrelated activities, not only for power plants. They must commit to ending international public financing for coal exploration, mining, and transport.
- Immediately disclose detailed data on public financing for coal, covering all relevant transactions by export credit agencies and information from wholly or partially state-owned banks on an annual, countryby-country, and project-by-project basis (including all project-level details necessary to provide a clear view of the climate and environmental impacts).

As the urgency of addressing climate change increases and the public health impacts of burning fossil fuels become more widely recognized, nations of the world, especially the G7 and G20, have made repeated commitments to both fight climate change and end fossil fuel subsidies. Virtually all nations have committed to taking steps to limit average global temperature rise to 2 degrees Celsius, and to make best efforts to limit the increase to 1.5 degrees Celsius. The Paris Agreement calls for finance flows consistent with these climate objectives.<sup>3</sup> Unfortunately, continued government financing for international coal projects undermines the Paris Agreement, as billions of dollars in government support continue to flow toward fossil fuels, including coal.

Government financing for coal—largely in the form of export support, but also as development aid and general finance—is facilitating the expansion of coal use and exacerbating climate change. The latest report from the Intergovernmental Panel on Climate Change (IPCC) makes clear that human activities, especially the burning of fossil fuels, have increased the concentrations of greenhouse gases in the atmosphere, with widespread environmental impacts. <sup>4</sup> Coal accounts for two-fifths of all global energyrelated carbon emissions—more than the contributions from oil or gas.<sup>5</sup> Researchers have calculated that 80 percent of global coal reserves will need to remain unused to avoid dangerous climate impacts.<sup>6</sup>

For this reason, governments must limit future coal projects to have a good chance of limiting future temperature increases. But at a time when the global community must marshal its resources to fight climate change, governments are using scarce public money to aggravate the problem. Even worse, they often try to sweep under the rug the financing they provide through national export credit agencies and other institutions, as these entities provide very limited public disclosure of the coal projects they finance.

New coal developments require huge amounts of capital. For example, a typical 600-megawatt coal-fired power plant might cost \$2 billion or more to build.<sup>7</sup> Coal development is supported through various international public finance mechanisms, including direct project finance and guarantees, policy and institutional reforms, technical assistance, and advisory services. This financing can come from multilateral development banks (MDBs) or bilateral finance, including export credit agencies (ECAs), bilateral aid, and international operations of national development and state-owned banks. This report reviews international coal financing from 2007 to 2015 in the G7 countries: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States. The database includes information on coal power plants, coal mining, transmission and distribution projects linked to coal power, and other related activities.

Developing coal projects requires financial decisions by investors and banks, both private and public. Ultimately, the availability of international financing determines a coal project's viability. Without financing, such projects would not exist. Given the climate, health, and environmental impacts, such projects should not be financed at all in the future—especially with public funds. Investing in and subsidizing coal power plants, mining, and infrastructure development in a carbon-constrained world is a losing proposition.

# TYPES OF INTERNATIONAL PUBLIC FINANCING FOR COAL

International support for coal takes many forms, including:

- Direct project finance: Loans, grants, and equity financing.
- Guarantees for projects: Insurance to cover the overall risk of an investment at a lower cost and longer tenor (typically I2 to 20 years) than commercial insurance.
- Policy lending and technical assistance: Allows MDBs and development agencies to influence policies, regulations, and institutions in order to alter the costs, benefits, and development preferences in favor of the coal sector.
- Loans to financial intermediaries: An international institution provides loans or equity financing to an entity such as a local bank, a private equity fund, or a special government-managed fund (e.g., an infrastructure development fund). The financial intermediary then passes on the original institution's funds to various investments, including coal projects.

See the Appendix for additional information.

# TYPES OF PUBLIC INVESTMENTS REVIEWED

COAL POWER PLANTS: Public finance is counted where it supports new coal power plants and the expansion of existing plants, as well as coal power generation associated with industrial processes.

COAL POWER PLANT EMISSION CONTROLS: Public finance is counted where it supports alterations to existing plants for limiting emissions.

COAL MINING: Public finance is counted where it supports new and existing coal mining projects—including the financing of equipment and transport, as well as coal imports and liquefied natural gas production from coal seams.

TRANSMISSION AND DISTRIBUTION: Public finance is counted where it supports electricity projects that are directly linked to coal power generation.

OTHER/UNSPECIFIED PROJECTS: Public finance is counted where it supports other coal-related activities, including coal export terminals, development policy loans linked to coal, and loans to financial intermediaries supporting coal where the projects supported are unclear.

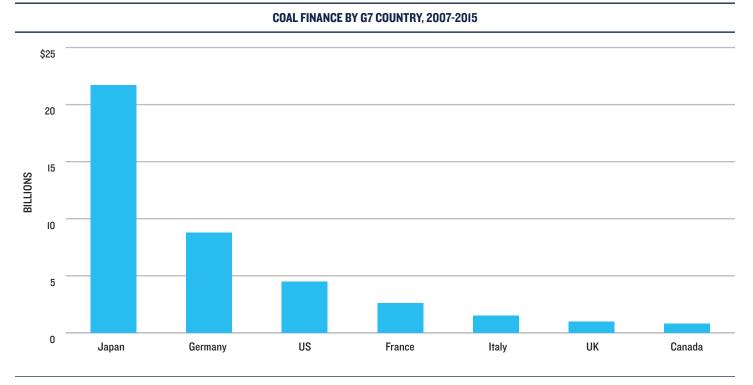
# **TOTAL FINANCING BY G7 COUNTRIES**

Last year, we revealed that large quantities of public financing have been flowing from key countries to coal projects around the world, playing a significant role in their development.<sup>8</sup> This year's report finds that between 2007 and 2015, G7 countries alone approved more than \$42 billion—an average of nearly \$5 billion a year—in public finance for coal. Given the difficulty of accessing data on projects financed by some institutions, however, this figure is likely an underestimation. Information disclosure on coal financing remains opaque, denying the public accurate information about the preferential treatment of and funding for coal projects and perpetuating the false claim that clean energy investments cannot be price-competitive with fossil fuels. A handful of countries are providing the funding, and they are increasingly isolated in their support for coal. In particular, Japan has opposed meaningful restrictions on public finance for coal and has been one of the most active countries in seeking out additional coal projects.

There are some encouraging signs of progress, such as last year's OECD ruling that limited some types of export credit support for the most inefficient coal power plants. However, large loopholes (see Appendix) will still allow OECD countries to provide substantial public finance for coal. Much stricter limits for coal finance are needed across a wider range of financial and development institutions.

## **COAL FINANCE BY COUNTRY**

Between 2007 and 2015, Japanese coal finance greatly outweighed finance from any other G7 country. This included coal financing by the Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI), and the Japan International Cooperation Agency (JICA), as well as Japan's contributions to the various multilateral development banks. Between 2007 and 2015, Japan financed more than \$22 billion worth of coal projects—52 percent of total G7 public finance for coal. In the same period, total coal finance from Germany was around \$9 billion, and the United States provided more than \$4 billion.



# **COAL FINANCE BY YEAR**

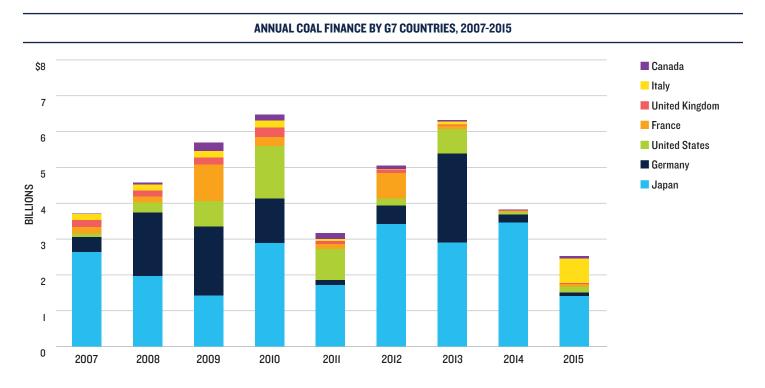
Total public financing for coal has fluctuated from year to year but has decreased in recent years. Overall public financing for coal by the G7 was highest in 2010, reaching more than \$6.5 billion. Coal financing nearly rebounded to 2010 levels in 2013 but dropped substantially in 2014; 2015 saw further declines in coal finance except from Japan and Italy. This trend also reflects the reduction in coal support by multilateral banks. For the United States, which has pledged to limit overseas coal power plant finance since June 2013, the amount of coal financing dropped substantially in 2014 and 2015.

# **2015 AND PENDING COAL PROJECTS**

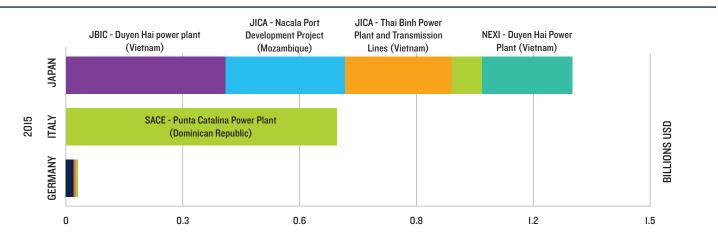
Some G7 countries continued to fund coal in 2015, despite OECD discussions throughout the year about limiting financing and heightened awareness of coal's contributions to climate change ahead of COP21 in December. There are still a number of coal projects under consideration for future financing.

Japan continues to be the worst offender among G7 countries. It approved \$1.3 billion in new coal projects in 2015. Japan financed a coal power plant in the first quarter of 2016—just weeks after the Paris Agreement was completed. Furthermore, our analysis identified nearly \$10 billion in pending projects currently under consideration by Japanese public finance institutions. In fact, the real figure is likely much higher, as the \$10 billion represents only those projects mentioned publicly.

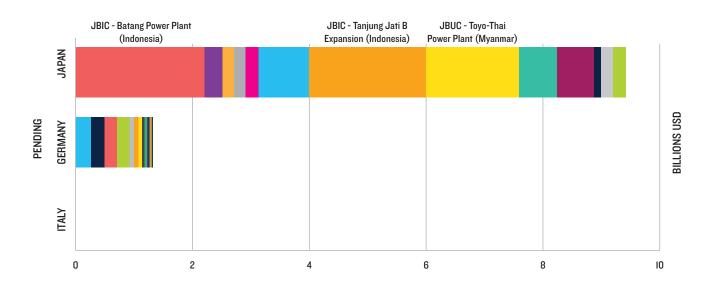
Japan may be the G7's top coal financier, but it is not alone. The German firm Euler Hermes manages the nation's export credit guarantees. It provided \$20 million to coal mining projects in 2015 and is considering financing future coal projects to the tune of \$1.3 billion. SACE, the Italian export credit agency, provided \$632 million in support for a coalfired power plant in 2015.



**COAL FINANCE IN 2015** 



#### **COAL FINANCE FOR PROJECTS UNDER CONSIDERATION**



#### **COAL FINANCING BY INSTITUTION AND SECTOR**

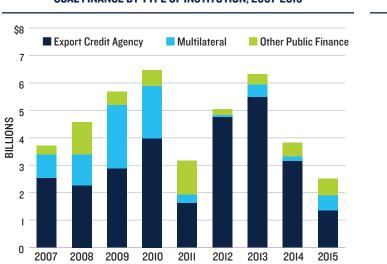
From 2007 to 2015, channels for coal financing shifted from MDBs and toward ECAs and other bilateral finance institutions. This likely reflects pledges from some of the bigger MDBs to limit coal financing and a subsequent shift to ECAs as the international public financing institution of last resort for coal, as other financial institutions and some countries have ended support.

From 2007 to 2015, G7 ECAs provided \$28 billion for new coal— 67 percent of the public coal financing identified in our analysis. The remaining public financing came from MDBs (\$8 billion, or 18 percent) and other sources of public finance (\$6 billion, or 15 percent).

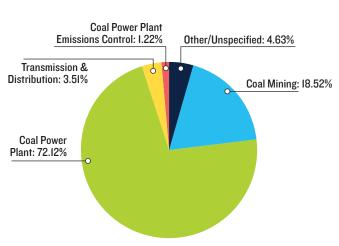
The vast majority of coal financing-about 75 percent of the total—went to coal power plants. Lesser amounts went to coal mining, transmission and distribution, emissions control, and other activities.

Of the public financial institutions analyzed, the Japan Bank for International Cooperation (JBIC), Euler Hermes, Nippon Export and Investment Insurance (NEXI), and the Japan International Cooperation Agency (JICA) provided the largest amounts of financing from 2007 to 2015. The two Japanese ECAs (JBIC and NEXI) were responsible for 41 percent of G7 ECA finance for coal.

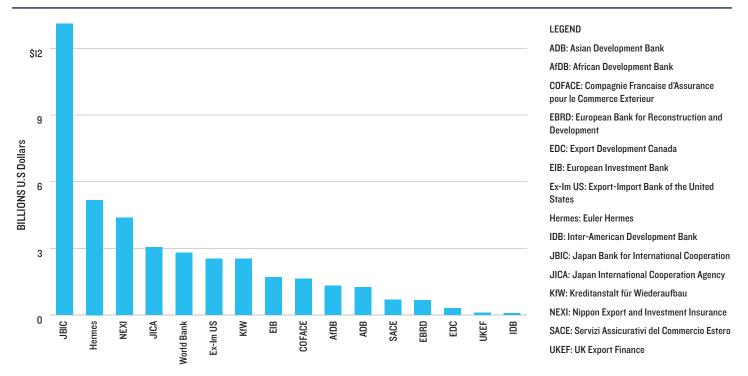
**COAL FINANCE BY SECTOR** 



#### **COAL FINANCE BY TYPE OF INSTITUTION, 2007-2015**



#### **G7 COAL FINANCE BY INSTITUTION, 2007-2015**



# THE HEALTH AND CLIMATE COSTS OF EXPORT CREDITS FOR COAL-FIRED POWER PLANTS

Export credits for coal-fired power plants can cause massive damage to our shared climate and the health of local communities. Putting a dollar figure on these damages provides a window into their magnitude.

In 2015, World Wide Fund for Nature (WWF) and Oil Change International published an assessment of the environmental costs of 20 coal power plants supported by export credit agencies.<sup>9</sup> Japan was responsible for up to \$10.6 billion per year of the damages calculated in the analysis and was the largest financial backer for the plants included in the study.

Using a methodology developed by the International Monetary Fund (IMF), the analysis assessed both the local air pollution and global climate change impacts of these coal plants. The analysis estimated the 2015 economic costs of emissions from these 20 coal power plants alone to be as much as \$32.1 billion.

The costs of health and climate damage far outweigh the value of the financing provided. The annual costs of local air pollution were estimated to be between \$3.6 billion and \$20.2 billion.

Over 50 years of a plant's possible lifetime, \$1 in export credit investment could produce more than \$100 in local air pollution costs alone (if no discounting is applied).

#### **GREENHOUSE GAS EMISSIONS FROM G7 COAL FINANCE**

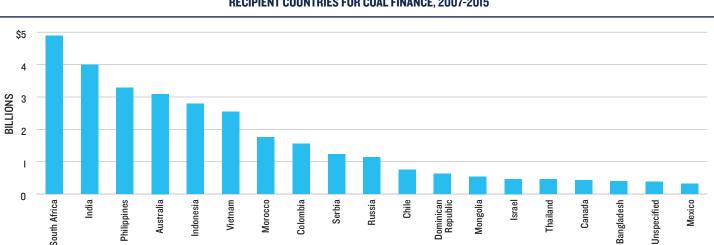
The installed electricity capacity of the coal-fired power plants funded by the G7 countries is over 85GW, nearly equal to the total electricity capacity of the United Kingdom in 2014.<sup>10</sup> Emissions from all coal plants financed by G7 governments from 2007 to 2015 added up to 101 million metric tons of carbon dioxide equivalent per year. That's the equivalent of the annual per-capita emissions in 2013 for 60 million Indians or 6 million Americans.<sup>11</sup> It should be noted that it is a very conservative estimate given three factors: (1) Many coal plant projects were not included because of the lack of data on plant size. (2) Emissions from coal mining and infrastructure projects were not calculated. (3) The assumptions used for calculating plant emissions (type of coal, type of plant technology, etc.) were conservative.

A recent analysis on new coal plant technology shows that even the most efficient new coal developments are not compatible with limiting global warming to 2 degrees Celsius (see text box, "Even the Most Efficient Coal Technology Is Not Compatible with 2°C Climate Scenarios"). In addition, calculating the health and climate impacts of emissions from coal plants shows that investments in coal projects will generate significant costs in terms of air pollution and human health (see text box, "The Health and Climate Costs of Export Credits for Coal-Fired Power Plants").

# EVEN THE MOST EFFICIENT COAL TECHNOLOGY IS NOT COMPATIBLE WITH 2°C CLIMATE SCENARIOS

An April 2016 report by Ecofys, commissioned by WWF, assessed the 2 degrees Celsius scenarios and a 1.5 degrees Celsius scenario of the Intergovernmental Panel on Climate Change and the International Energy Agency. The 2-degree scenarios show that the global electricity sector needs to be decarbonized by 2050.

The report found that even the most efficient coal plant technology (advanced ultra-supercritical) is incompatible with the 2-degree target, let alone I.5 degrees. The global carbon budget and the limited time remaining to reduce GHG emissions simply do not allow for retiring coal plants and replacing them with new, more efficient coal plants, let alone extending their capacity. The I,400 GW of currently planned coal capacity is not compatible with limiting warming to 2 degrees Celsius. Even if planned capacity used the most efficient coal plant technology, the 2-degree goal would still not be within reach.<sup>12</sup>



#### **RECIPIENT COUNTRIES FOR COAL FINANCE, 2007-2015**

## **RECIPIENT COUNTRIES FOR COAL FINANCE**

South Africa, India, the Philippines, and Australia were the top recipients of G7 coal financing from 2007 to 2015. Over nine years, not a single coal-fired power plant backed by G7 bilateral public finance overseas took place in a World Bank-designated low-income country, such as Cambodia or Tanzania.<sup>13</sup> These are the nations actually facing the most pressing energy poverty concerns. This contradiction flies in the face of the claim of some G7 governments that their public finance for coal will increase energy access for the poorest.

#### PLEDGES TO RESTRICT COAL FINANCE

Recognizing the contradiction of taking action on climate change while subsidizing coal use and extraction, several governments and financial institutions have pledged to limit coal financing. In 2013, several MDBs and national governments began adopting significant restrictions on international public financing of coal, mainly due to concerns about the potential climate impacts. These institutions include the World Bank Group, the European Bank for Reconstruction and Development (EBRD), and the European Investment Bank (EIB). Within the G7, it includes France, the United Kingdom, and the United States. Since 2013, public financing for coal has declined, proving that the commitments have been somewhat effective.

In November 2015, the parties to the OECD Arrangement on Officially Supported Export Credits-including Australia, Canada, the European Union, Japan, Korea, New Zealand, Norway, Switzerland, and the United States-agreed to new rules on official support for coal-fired power plants. This includes restrictions on official export credits for the least efficient coal-fired power plants (though plants with operational carbon capture and storage are exempted). The agreement will eliminate export credits for large superand subcritical coal-fired power plants, while allowing support for smaller subcritical plants (under 300MW) and medium-size supercritical plants (300 to 500MW) in poorer developing countries. It still allows export credits for all sizes of ultra-supercritical plants globally. For some countries with lower rates of electrification, financing will still be available for small and medium-size supercritical plants. The new rules will take effect January 1, 2017, and the agreement will undergo a mandatory review process starting in 2019 to align it with the latest climate science and technological developments.14

Unfortunately, these policies apply only to eligible export credits, and only to certain sizes and classes of coal power plants-not coal mining or associated infrastructure. This means there are still many ways in which governments might continue to support coal (see Appendix).

PUBLIC FINANCIAL INSTITUTION COMMITMENTS TO LIMIT SUPPORT FOR COAL POWER PLANTS					
Country	Commitment at WB, EIB, EBRD	Commitment at ADB, AfDB, IDB	Commitment to OECD Arrangement Rules for Official Export Credits	Commitment at National Development Finance Institution	Commitment at National Export Credit Agency
France		Yes		Yes	Yes
Germany	Yes	No	Yes	Yes	No
Italy		No		No	No
Japan		No		No	No
United Kingdom		Yes		Yes	No
Canada		No		No	No
United States		Yes		Yes	Yes

The Paris Agreement and the OECD Arrangement on Officially Supported Export Credits could signal the start of a decline in global coal financing, provided that countries honor their commitment to transition to cleaner energy and stop financing coal. Still, some banks, such as the Asian Development Bank, African Development Bank, and Inter-American Development Bank, have continued their support for coal projects with very limited restrictions.<sup>15</sup>

# **CHALLENGES AHEAD**

Japan, which continues to finance coal at significant levels, stands out as a clear exception to the declining global interest in public financing of coal projects. It is not yet certain whether the recent overall drop in coal financing is the beginning of a long-term trend. It is also possible that full information for projects approved in 2015, the most recent year considered in this analysis, has not yet been made publicly available.

Available information suggests that Japan is still considering financing for new international coal projects. Japan's agency for international development, JICA, is currently considering financing for coal projects in South Africa and Myanmar.<sup>16</sup> Germany is considering projects in several countries including Croatia, South Africa, and Russia. Although multilateral commitments to reduce coal financing are largely being honored, Japan, Germany, and other nations are still promoting coal developments around the world.

Japan and Germany continue to finance coal at substantial levels, through ECAs, development aid, and wholly or partially state-owned banks working overseas. In this respect, such governments lag behind a growing number of private financial institutions, which are reducing or banning coal from their lending or investment portfolios. In the past two years, at least 11 commercial banks have banned coal mining from their lending portfolios, and 18 of the world's largest institutional investors (e.g., Allianz, Axa, and KLP) have divested from coal mining and coal-fired power plants.<sup>17,18</sup> Financing coal projects abroad also contrasts with domestic policies. For instance, the U.K. government is considering a shutdown of coal-fired power plants by 2023, and Germany is phasing out some financial support for coal domestically—even while it continues to finance coal abroad.<sup>19</sup>

# RECOMMENDATIONS

To address climate change and improve transparency, governments must:

- End international public financing for fossil fuels, beginning with coal power plants. G7 governments need to strengthen the OECD agreement and immediately end all international public financing for coal power plants, except for very rare circumstances in which no other option is available to provide immediate energy access in low-income communities.
- G7 governments must limit funding for all coalrelated activities, not only for power plants. They must commit to ending international public financing for coal exploration, mining, and transport.
- Immediately disclose detailed data on public financing for coal, covering all relevant transactions by export credit agencies and information from wholly or partially state-owned banks on an annual, countryby-country, and project-by-project basis (including all project-level details necessary to provide a clear view of the climate and environmental impacts).

Public financing has played a significant role in supporting coal projects over the past nine years. In spite of repeated climate change mitigation commitments by all countries to limit the expansion of fossil fuel use, and in spite of annual commitments at G20 meetings and other forums to end fossil fuel subsidies, nations and international institutions continue to provide significant public support for coal, oil, and gas. Given the severe climate impacts of fossil fuels, such public support for carbon-intensive energy sources should be quickly phased out—beginning with public financing for coal.

# **DATA COLLECTION**

NRDC, Oil Change International, and WWF collected export credit agency and other bilateral public finance data from institutional websites, news articles, the IJGlobal Project Finance & Infrastructure Journal, and OECD documents. We received assistance and feedback from a number of organizations, including Urgewald for German institutions and the Japan Center for Sustainable Environment and Society (JACSES) for Japanese institutions. The MDB data were collected from Oil Change International's Shift the Subsidies database.

Pre-2015 data came from NRDC, Oil Change International, and WWF's 2015 report, "Under the Rug: How Governments and International Institutions Are Hiding Billions in Support to the Coal Industry."<sup>20</sup> More detailed information on methodology can be found in Annex I of that report. We contacted each financial institution that showed new project data for 2015 or later. This allowed institutions to clarify and comment on the data prior to publication of this report. The database contains a summary of the institutional responses we received.

# **INSTITUTIONS COVERED**

- Major MDBs and multilateral finance institutions (MFIs): These institutions provide assistance to recipient countries and the private sector. All MDBs are backed by large sums of public money from member governments, allowing them to finance recipient governments and the private sector at lower interest rates and on better terms (e.g., longer tenors) than commercial lenders. The database includes information on coal financing from: World Bank Group (which consists of the International Bank for Reconstruction and Development, the International Development Agency, the International Finance Corporation, and the Multilateral Investment Guarantee Agency), the African Development Bank, the Asian Development Bank, the Inter-American Development Bank, the European Bank for Reconstruction and Development, and the European Investment Bank.
- **Export credit agencies (ECAs) in G7 countries:** ECAs provide government-backed loans, credits, and guarantees for the international operations of corporations from the home country. ECAs provide public financial backing for risky projects, including coal, which might otherwise never get off the ground. Most industrialized nations and emerging economies have at least one ECA, which is usually an official or quasi-official branch of government. The database includes information on coal financing from the ECAs Export Development Canada (EDC), France's Compagnie Francaise d'Assurance pour le Commerce Exterieur (COFACE),

Euler Hermes (Germany), Italy's Servizi Assicurativi del Commercio Estero (SACE), Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI-Japan), UK Export Finance (UKEF), and Export-Import Bank of the United States (Ex-Im US).

Development agencies and development banks: In addition to ECAs, many countries have bilateral finance institutions that may provide financing for coal, including development finance and aid agencies, international arms of national development banks, or trade promotion agencies. These include the Japanese International Cooperation Agency (JICA) and German Kreditanstalt für Wiederaufbau (KfW).

Many institutions provide a mix of services. ECAs may provide bilateral development finance in addition to export credits. For example, JBIC provides bilateral aid in addition to financing overseas investments by Japanese companies. KfW supports domestic projects, bilateral aid, and export finance. There are also bilateral aid agencies such as JICA that may provide loans, grants, policy lending, and technical assistance. Generally, these institutions finance international coal projects, but they sometimes also support domestic coal projects. These projects were also included in the database when information was available.

# TYPES OF INTERNATIONAL PUBLIC FINANCIAL SUPPORT FOR COAL

International support for coal takes many forms, including:

- Direct project finance: MDBs and bilateral institutions may provide direct funding for coal projects through loans, grants, and equity financing. Direct funding can support coal projects, including exploration, mining, production, rail lines, ports, power generation, power transmission and distribution systems, coal-bed methane capture, and rehabilitation and upgrading of coal power units.
- Guarantees for projects: Guarantees are important catalysts for obtaining project finance. MDBs, ECAs, and other public financial institutions provide insurance covering the overall risk of an investment at a lower cost and longer tenor (typically 12 to 20 years) than commercial insurance. Public guarantees help to extend the tenors on project loans, which can be a key limitation for large-scale coal projects. Guarantees from public institutions may cover the risks of currency transfer restrictions, expropriation, war and civil disturbance, and breach of contract. In addition, MDBs may support the creation and funding of national government institutions that provide government guarantees covering delays or failure to secure licenses, changes in regulations or laws, or payment obligations for state-owned enterprises.

These government guarantees transfer private investment risks to the public.

- Policy lending and technical assistance: Through policy lending and technical assistance, MDBs and development agencies influence policies, regulations, and institutions that alter the costs, benefits, and development preferences in favor of the coal sector. For instance, in 2014, the World Bank provided financing to Pakistan for power sector reform in general, including investments in coal plants.
- Financial intermediaries: International institutions are increasingly using financial intermediaries to make investments, including in coal. In this arrangement, the institution provides loans or equity financing to an entity such as a local bank, a private equity fund, or a special government-managed fund (e.g., an infrastructure development fund). The financial intermediary then passes on the original institution's funds to various investments, including coal projects. Unlike with direct project investments, there is often no publicly available information on these individual subproject investments, making it difficult to track what ultimately happens to institutional funding through financial intermediaries. The extent to which coal is assisted through these activities is thus unknown. For instance, the Export Import Bank of the United States' criteria would not allow financing for the Batang coal power plant in Indonesia directly, but the World Bank (of which all G7 countries are members) is considering financing the Indonesia Infrastructure Finance project. In practice, this financing would include support for the Batang coal-fired power plant.

All types of financial support were included in the database, including direct finance, guarantees, and other types of financing arrangements, where information was found.

## LOOPHOLES FOR SUPPORTING COAL

Even with pledges not to finance coal plants except in "rare circumstances," there are a number of ways in which institutions may continue to finance coal:

- Potential risk of lax interpretation of "rare circumstances" for coal plants and support for coal mining or infrastructure not covered by the pledge;
- Indirect support through financial intermediaries, equity funds, etc., as many of these funds include significant amounts of coal finance and do not disclose specific projects; and
- Policy, program, and infrastructure loans in countries with significant plans for coal expansion—for example, energy policy lending may be part of a country's general policy loan.

# **A NEED FOR BETTER REPORTING**

Better data on public finance for coal is a must. This public finance for coal moves through largely unknown and opaque institutions. In general, export credit agencies, which are the major actors in this space, are so secretive that even their official multilateral coordinating body, the OECD Export Credit Group, does not have access to adequate data. Governments of the world are hiding their ongoing support for fossil fuels and for coal in particular. Hopefully, the decline in financing in 2014 and 2015 is an indication that countries may be moving away from financing coal; however, it is too early and the data is too opaque to tell definitively. Since the funds are public, the entire reporting process and data should be transparent. Because coal is a grave threat and accelerator of climate change, it is especially critical that governments fully and immediately disclose the full details of their public finance for coal.

ENDNOTES

17 Worldwide Fund for Nature, forthcoming.

 $<sup>1 \</sup>qquad \text{Chen, Han, ``The Paris Agreement on Climate Change,'' Natural Resources Defense Council, December 2015, www.nrdc.org/sites/default/files/paris-climate-agreement-IB.pdf.}$ 

<sup>2</sup> US Energy Information Administration, "FAQs," February 2, 2015, www.eia.gov/tools/faqs/faq.cfm?id=79&t=11.

 $<sup>\</sup>label{eq:convertion} 3 \quad UN \ Framework \ Convention \ on \ Climate \ Change, \ "Adoption \ of the Paris \ Agreement," \ December 12, 2015, unfccc.int/documents/advanced_search/items/6911. php?priref=600008831.$ 

Intergovernmental Panel on Climate Change, Climate Change 2014 Synthesis Report, p.63, www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5\_SYR\_FINAL\_All\_Topics.pdf.
US Energy Information Administration, "FAQs," February 2, 2015, www.eia.gov/tools/faqs/faq.cfm?id=79&t=11.

<sup>6</sup> McGlade, Christophe and Paul Ekins, "The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C," *Nature* 517 (January 8, 2015): 187-190, www.nature.com/nature/journal/v517/n7533/abs/nature14016.html.

<sup>7</sup> Oil Change International, "Background on Coal Subsidies," priceofoil.org/coal-subsidies-toolkit/background/.

<sup>8</sup> Natural Resources Defense Council, Oil Change International, and Worldwide Fund for Nature, "Under the Rug: How Governments and International Institutions are Hiding Billions in Support to the Coal Industry," June 2015, priceofoil.org/2015/06/02/rug-governments-international-institutions-hiding-billions-support-coal-industry/.

<sup>9</sup> Oil Change International and World Wide Fund for Nature, *Hidden Costs: Pollution from Coal Power Financed by OECD Countries*, November 2015, priceofoil.org/content/uploads/2015/11/Hidden-Costs-of-Coal-Economic-Costs-of-OECD-Coal-Finance.pdf.

<sup>10</sup> The Shift Project, "Countries with highest installed power capacity," http://www.tsp-data-portal.org/TOP-20-Capacity#tspQvChart.

<sup>11</sup> These numbers are based on total lifetime emissions divided by 2013 per capita emissions. From Emission Database for Global Atmospheric Research, "CO2 Time Series 1990–2013 per Capita for World Countries," accessed October 28, 2015, edgar.jrc.ec.europa.eu/overview.php?v=CO2ts\_pc1990-2013.

Wong, Lindee, David de Jager, and Pieter van Breevoort, "The Incompatibility of High-Efficient Coal Technology with 2°C Scenarios," Ecofys, April 2016, bit.ly/1SeRhYG.
World Bank, "Data: Low Income," 2016. data.worldbank.org/income-level/LIC.

<sup>14</sup> Organisation for Economic Co-operation and Development (OECD), "Statement from Participants to the Arrangement on Officially Supported Export Credits," November, 18, 2015, www.oecd.org/newsroom/statement-from-participants-to-the-arrangement-on-officially-supported-export-credits.htm.

<sup>15</sup> Piccio, Lorenzo, "Coal or No Coal: A Balancing Act for MDBs," Devex, January 18, 2016, www.devex.com/news/coal-or-no-coal-a-balancing-act-for-mdbs-87610.

<sup>16</sup> See Maqutu, Andiswa, "Japan Body Open to Eskom for Funds and Technology," BD Live, February 10, 2016, www.bdlive.co.za/business/energy/2016/02/10/japan-bodyopen-to-eskom-for-funds-and-technology. Also see Shin, Aung, "Coal Power Central to Gov't Energy Plans," *Myanmar Times*, February 8 2016, www.mmtimes.com/index.php/ business/18859-coal-power-central-to-gov-t-energy-plans.html.

<sup>18</sup> In 2015 the commercial bank Natixis entirely banned coal mining and coal utilities from their lending portfolio, creating a world precedent.

See www.banktrack.org/.

<sup>19</sup> Bast, Elizabeth, et al., Empty Promises G20 Subsidies to Oil, Gas and Coal Production, Oil Change International, November 2015. www.odi.org/sites/odi-assets/publications-opinion-files/9957.pdf.

<sup>20</sup> Natural Resources Defense Council, Oil Change International, and Worldwide Fund for Nature, "Under the Rug."