



UNDER THE RUG

HOW GOVERNMENTS AND INTERNATIONAL INSTITUTIONS
ARE HIDING BILLIONS IN SUPPORT TO THE COAL INDUSTRY

JUNE 2015



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Cover image: A worker covers his face to protect it from
rising dust at the under-construction coal-fired power
plant, partially financed by the Japan Bank for International
Cooperation, in Kudgi, India. JBIC agreed in January 2014
to provide \$210 million in loans to Indian power company
NTPC Ltd. to finance the purchase of steam turbine
generators and boiler feed water pumps to be used in the
coal plant from a local subsidiary of Toshiba, a major
Japanese company. ©AP Photo/Rahi

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For more information on public financing for coal, please visit:

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EXECUTIVE SUMMARY

Over the last eight years, as the scope of the climate crisis has deepened, nations of the world, and particularly of the G20 and G7, have made repeated clear commitments to both fight climate change and end fossil fuel subsidies. Virtually all nations have made commitments to limit global temperature rise to 2°C (3.6°F).

And yet, billions of dollars' worth of government support continues to flow towards fossil fuels and, incredibly, towards coal. This government financing for coal – largely in the form of export support, but also as development aid and general finance – is perpetuating coal use and exacerbating climate change. It needs to stop, immediately.

The latest report from the Intergovernmental Panel on Climate Change (IPCC) demonstrates clearly that at least 75 percent of existing fossil fuel reserves must stay in the ground to have a good chance at limiting global warming to 2 degrees.¹ As coal makes up two-thirds of the carbon content of known global fossil fuel reserves, coal poses a serious threat to the climate. Using scarce public resources to subsidize coal power plants, mining, and infrastructure development in a carbon-constrained world is unacceptable.

The full extent of government financing for coal overseas is not common knowledge, and it is revealed here for the first time. A very large amount of public financing has been flowing to coal projects around the world. Our analysis finds that public finance has played a significant role in supporting coal projects over the last 8 years. **Between 2007 and 2014, more than US \$73 billion – or over \$9 billion a year – in public finance was approved for coal.**²

This funding is being provided by a handful of countries that continue to resist pressure to end this public financing. **Japan provided the largest amount of coal financing of any country**, with over \$20 billion of finance from 2007 to 2014. In the OECD, Korea and Germany were the next largest sources of funding for coal (See Figure ES-1). Japan, Korea and Australia are leading the opposition to limits on coal finance in international discussions.

¹ Intergovernmental Panel on Climate Change, Climate Change 2014 Synthesis Report, https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_All_Topics.pdf p.63

² Data sources include Export Credit Agencies, as well as other public finance institutions such as development agencies, state-owned banks, and Multilateral Development Banks. The database largely focuses on overseas financing, however, where Export Credit Agencies provided finance to domestic projects, this financing was also included.

This funding has largely gone unnoticed as it is often hidden from view as nations of the world are choosing to sweep this under the rug, rather than face the necessary task of cleaning up their own houses.

The rug, in this case, is a web of public finance moved 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 literally hiding their ongoing support for fossil fuels, and for coal in particular.

At various upcoming international meetings over the next 6 months, the possibility of a coordinated international ban on coal export finance is on the table. In order to support the success of this initiative, the Natural Resources Defense Council, Oil Change International, and the World Wide Fund for Nature have prepared this briefing.

Combining all known public sources, and augmenting them with subscription industry databases, this report makes comprehensive information on public financing for coal easily accessible for the first time. We include information about public finance for coal in OECD countries, China, and Russia from 2007 to 2014. Public finance is understood to include direct loans, guarantees, policy lending, and technical assistance, as well as coal lending through financial intermediaries where information could be found. This resource will be updated on an ongoing basis and will be made available online at: www.ShiftTheSubsidies.org/coal.

International public finance for coal is responsible for as much pollution as the nation of Italy. Total greenhouse gas (GHG) emissions related to the international public finance for coal between 2007 and 2014 conservatively amounted to **almost half a billion tons of carbon dioxide equivalent (CO₂e) per year.** Emissions are close to a total of 18 gigatonnes for the entire lifetime of the supported power plants alone.

Additional key findings include:

- ❏ **OECD Export Credit Agencies are the biggest part of the problem, and their support for coal has been increasing: they have become the last resort source of international public funding for coal from rich countries.** Nearly half (47 percent) of the total international finance for coal came through Export Credit Agencies in countries that are members of the Organisation for Economic Co-operation and Development (OECD), OECD Export Credit Agencies also fuel the bulk of related greenhouse gas emissions (44 percent).



ES-1. Total Public Coal Finance 2007-2014 by Country (billion USD)

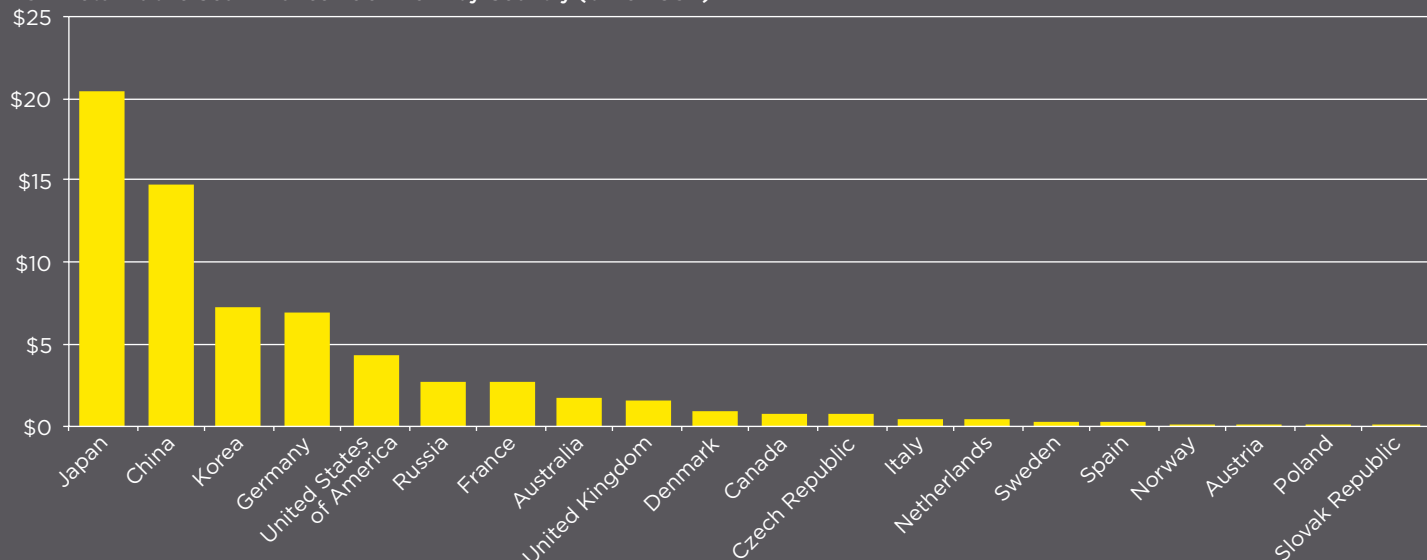


Figure ES-2. International Public Finance for Coal By Year, 2007-2014 (billion USD)

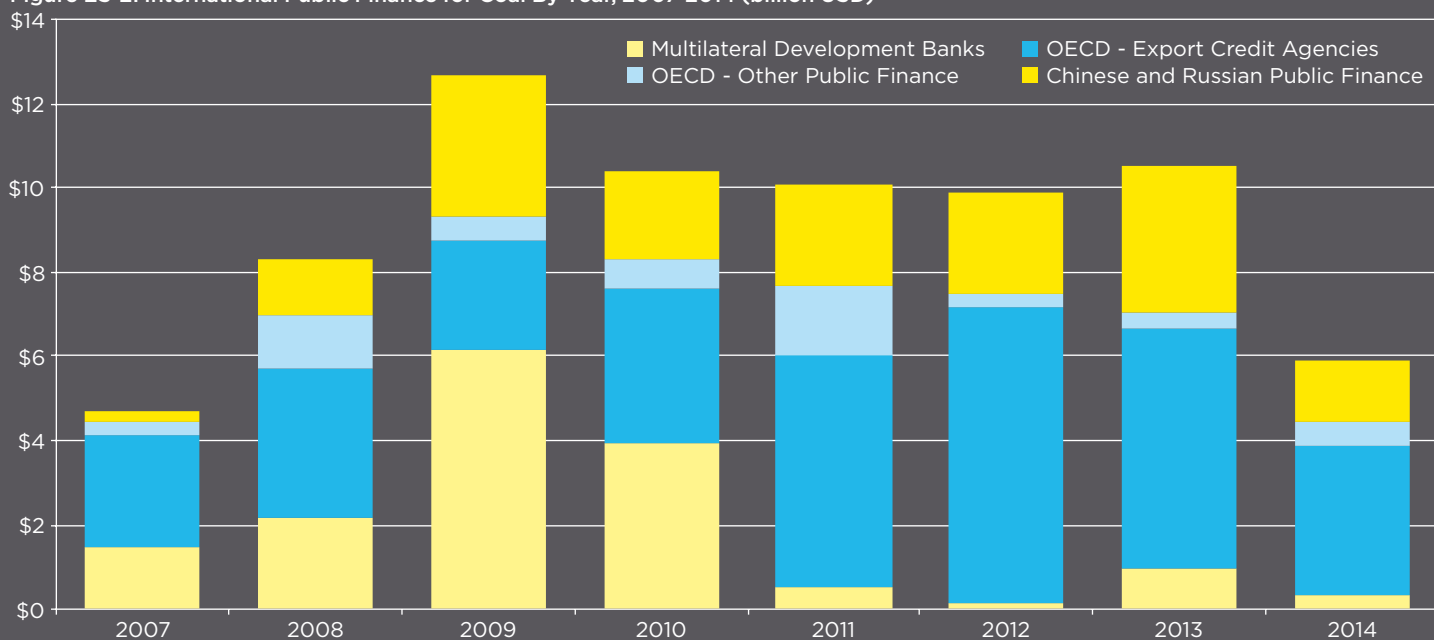
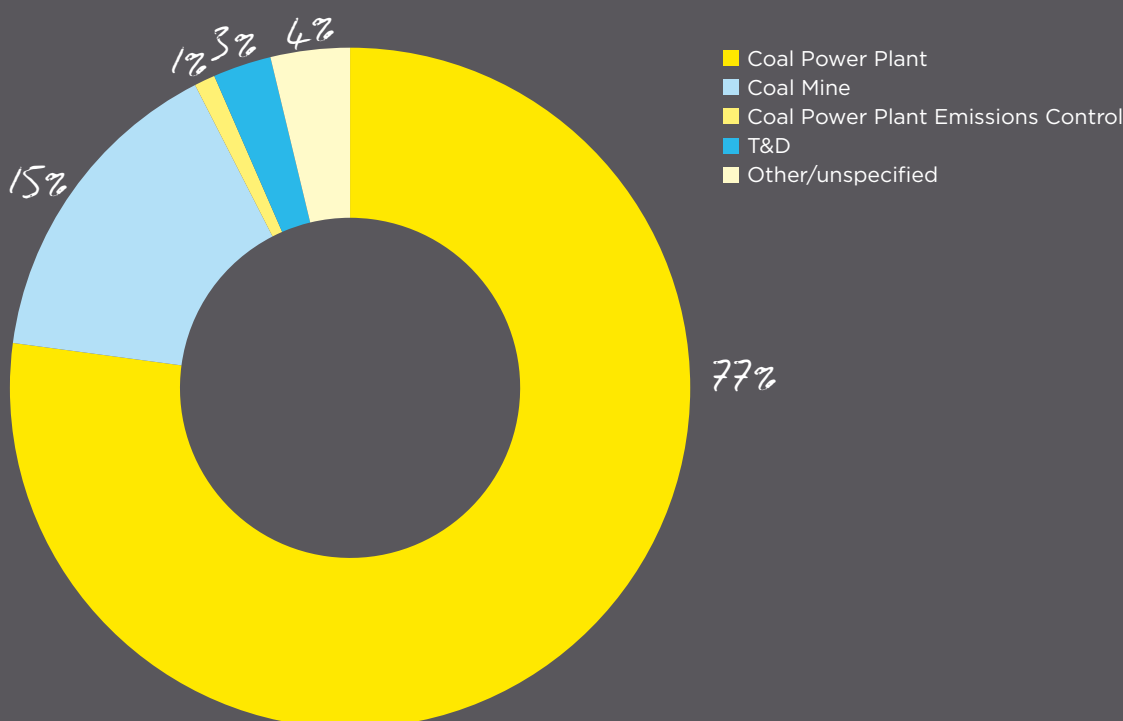


Figure ES-3. Public Finance for Coal 2007-2014 by Project Type (percent of total finance)



With the exception of the United States, the largest OECD Export Credit Agencies backed projects with greenhouse gas outputs that are equivalent to a significant proportion of their national annual emissions – between 7 percent and 10 percent.

The remainder of public finance for coal comes from Chinese and Russian public finance institutions (23 percent), and Multilateral Development Banks (22 percent) other OECD country public finance institutions (8 percent) (See Figure ES-2).

The vast majority of coal finance (77 percent) went to coal power plants, with the remainder going mainly to mining (15 percent) and transmission and distribution, coal plant emission controls, and other coal support (see Figure ES-3).

Exactly zero export finance for coal has gone to Low Income Countries, where the need for access to energy is greatest. In addition one-fourth of it went to High Income Countries with no energy poverty issues. The oft stated argument for public spending for coal to support energy access is therefore largely baseless.

Governments – particularly Japan, Korea and Australia- are placing the corporate profits of their own coal companies above the interests of the global climate. Export Credit Agencies do not have development mandates. Their purpose is to help domestic companies to export. Those institutions that do have development mandates, Multilateral Development Banks and aid agencies, are rapidly reducing their coal lending. It is also worth noting that Germany, as one of the largest coal financiers, has not committed to end its export financing of coal plants in its recent national position³, although they have for their aid agencies, and are phasing out their own domestic subsidies for coal.

³ German Ministry for Economic Affairs and Energy. "Federal Government report on the financing of international coal-related projects for the Economic Committee of the Bundestag" December 22, 2014. <http://www.bmwi.de/English/Redaktion/Pdf/bericht-der-bundesregierung-zur-internationalen-kohlefinanzierung-fuer-den-wirtschaftsausschuss-des-deutschen-bundestages-englisch,property=pdf,bereich=bmwi2012,sprache=en,rwb=true.pdf>

- ❏ **There are bright spots, and champions in the fight to end coal public finance. The United States and France are clear leaders in this arena.** Multilateral Development Banks, led by the World Bank, have also sharply reduced their coal support in recent years. This is significant recognition of the need to end public support for coal.
- ❏ **China and Russia also provide significant support for the coal industry.** It is not known if these countries are considering ending public support for coal. It is strongly suspected that our data for these countries (especially China) is incomplete.

Several governments and financial institutions have also recently pledged to stop some coal finance after finally recognizing the disconnect between taking serious action on climate change and continuing to subsidize coal use and extraction. Our analysis suggests that there was a drop in public coal finance in 2014, likely reflecting commitments to stop investing in coal overseas by some countries and institutions.

Over time, multilaterals (like the World Bank Group) have decreased financing for coal, but certain governments (e.g. Japan) continue to finance coal bilaterally at substantial levels - through Export Credit Agencies, development aid, and state-owned banks working overseas. So although multilateral commitments to reduce this financing are largely being met, individual governments are still leading emerging markets to invest in coal.

RECOMMENDATIONS

To address climate change and improve transparency, governments should:

- ❏ **Immediately end all international finance for coal**, including via Export Credit Agencies, development banks and agencies, and state-owned banks, except for very rare circumstances to support energy access for the poor where no other option is available;
- ❏ **Phase out international public finance for all fossil fuel projects**, beginning immediately with projects focused on exploration for more fossil fuels; and
- ❏ **Immediately disclose exhaustive data on public finance for the entire energy sector**, given its high impact on climate change. Such disclosure should cover all financing - including all Arrangement and non-Arrangement transactions by Export Credit Agencies and information from majority state-owned banks - on an annual, country-by-country, and project-by-project basis (including all project-level details necessary to provide a clear view of the climate and environmental impacts of each project).

Some governments are choosing to sweep their dirt under the rug, rather than face the necessary task of cleaning their own houses up and ending support for coal. But some of the trends are clearly encouraging. If the decline in coal finance indicated in 2014 continues, and an international agreement to end public finance for coal emerges, it would be a welcome first step to curbing public support for fossil fuels. Further, continued support for oil and gas — at much greater levels than coal, as shown by official data — is the next cause for concern. Public support for all fossil fuels must end in a climate-constrained world.



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BACKGROUND ON COAL AND INTERNATIONAL FINANCE



The Intergovernmental Panel on Climate Change (IPCC)'s latest data shows that 75 percent of fossil fuel reserves must stay in the ground if the world is to achieve the goal of limiting global warming to 2°C - the conservative, globally accepted threshold of average global temperature increase for avoiding catastrophic climate change. As known global coal reserves have the highest carbon content of any fossil fuel, coal poses a serious threat to the climate. If coal use continues unabated, it will lock the planet into a future of devastated landscapes, damaged public health, and dangerous global warming. For more on fossil fuels and the global carbon budget, see Box 1.

New coal developments, whether for mining, power plants, or transport infrastructure, require huge amounts of capital. The construction of a 600-megawatt coal-fired power plant can typically cost US\$2 billion or more. As such, the development of coal in any given situation depends largely on the

financial decisions of investors and banks, both private and public.

International finance occupies a unique position of influence on the financing and policies promoting the development of coal. Coal development is supported through various international 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.

In 2013, several MDBs and national governments started to adopt significant restrictions on international public financing of coal, mainly due to climate concerns. These institutions include the World Bank Group, the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), and the governments of the United States, the United Kingdom, France, the Netherlands,

and the Nordic countries. See Table 1 for more detail on country commitments.

The policies all restrict the international financing of coal power plants except in rare circumstances, typically for the poorest countries that have no alternatives to coal. The EIB and the Export-Import Bank of the United States further add Emissions Performance Standards of 550g and 500g per kWh respectively.

While there is a new precedent from the Dutch bilateral aid agency FMO to end support for coal mining in addition to coal plants,⁴ generally, the policies only apply to power plants – and not coal mining or other associated infrastructure. Further, there are a number of ways in which these governments continue to support coal in spite of these new commitments (See Box 2).



Table 1. Public Financial Institution Commitments to Limit Support for Coal Power Plants

Country	Commitment at WB, EIB, EBRD	Commitment at ADB, AfDB, IDB	OECD donor country	Commitment at National Development Finance Institution	OECD member	Commitment at National Export Credit Agency
Austria	Yes		OECD donor countries (DAC members)		OECD countries	
Belgium						
Denmark		Yes		Yes		
Finland		Yes		Yes		
France (G7/G20)		Yes		Yes		Yes
Germany (G7/G20)				Yes		
Greece		Not member				
Ireland						
Italy (G7/G20)						
Luxembourg						
Netherlands		Yes		Yes*		
Norway		Yes		Yes		
Poland		Not member				
Portugal						
Slovak Republic		Not member				
Slovenia						
Spain						
Sweden		Yes		Yes		
Switzerland						
UK (G7/G20)		Yes		Yes		
Australia (G20)						
Canada (G7/G20)						
Czech Republic						
Iceland						
Japan (G7/G20)						
Korea (G20)						
New Zealand						
U.S. (G7/G20)		Yes		Yes		Yes
Chile						
Estonia						
Hungary						
Israel						
Mexico (G20)						
Turkey (G20)						
China (G20)					Non-OECD countries	
Russia (G20)						

*FMO also committed to end support for coal mining, setting a precedent

Box 1. Fossil Fuels and Climate Change

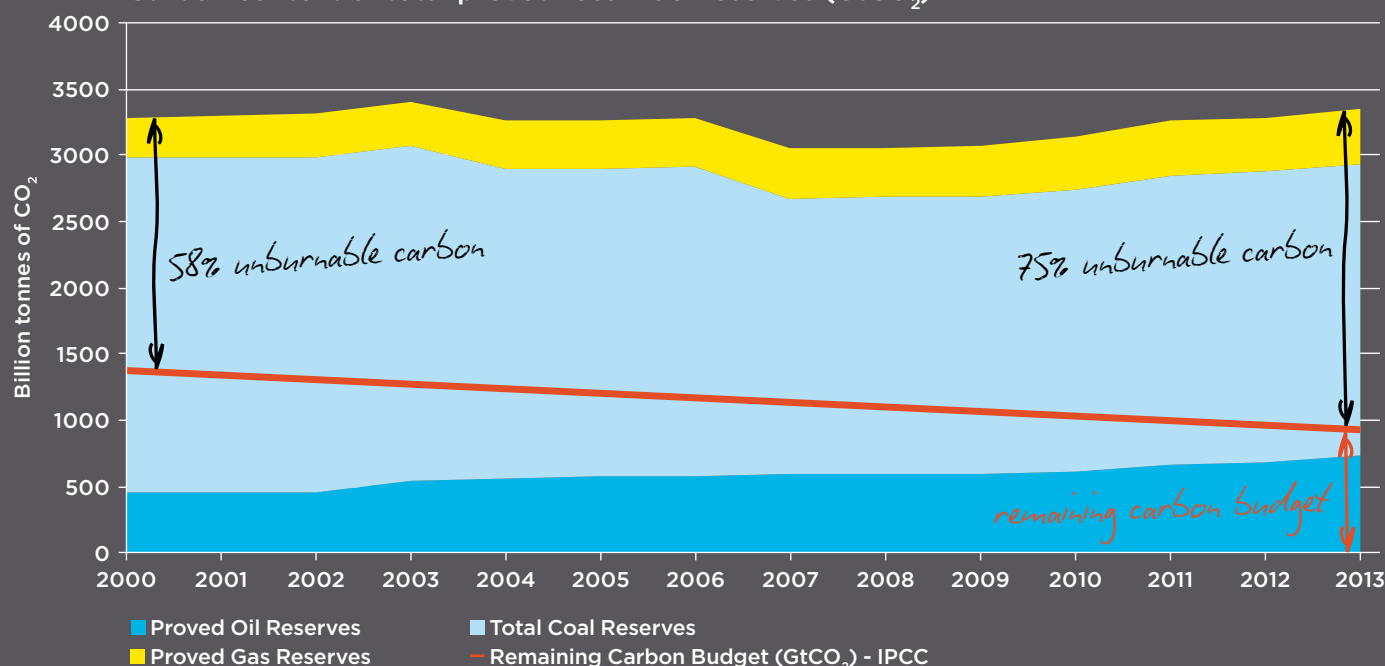
The focus of this report and the accompanying database is to identify international public support for coal. Identifying and ending public coal support is a critical first step in addressing climate change. But it won't be enough: public support for all fossil fuels needs to be addressed in order to adequately combat climate change.

The percentage of total fossil fuel reserves that are unburnable has grown rapidly over the past decade: proven global oil, gas and coal reserves have risen, while the carbon budget (the amount left to burn) has shrunk as the result of rising greenhouse-gas (GHG) emissions (See Figure 1).

Data from the OECD, which was used in this report to aid in identifying financed coal projects, also included additional background information on export finance for other fossil fuels. Although this information is likely not comprehensive, the OECD data shows that oil and gas support dwarfed the support to coal over the last ten years.

Data on fossil fuel projects in the Shift the Subsidies database shows that public finance continues to support a significant number of projects that support fossil fuel exploration – public money going to support finding more oil, gas, and coal resources, even when it is clear we can only burn a fraction of already-proven fossil fuel resources.

Figure 1. The carbon content of fossil fuel reserves in comparison to the carbon budget
Carbon content of total proved fossil fuel reserves (GtCO₂)



Box 2. Three Alternate and Emerging Avenues for Coal Support

The policies that some institutions and countries have adopted limiting international financing for coal are an initial step toward reducing coal use and meeting climate commitments. However, even with these initial policies in place, there are several significant remaining avenues for public coal support:

1. Institutions and Countries without Commitments

- ❑ A number of countries, including Japan, China, Korea, and Russia, have not yet pledged to limit international coal financing and continue to provide substantial amounts of international finance for coal. Germany has limited its bilateral aid support for coal, but continues to finance coal through export finance, both via Euler Hermes and the export finance branch of KfW. In fact, a recent response to a parliamentary inquiry suggests that Hermes is currently considering coal projects in 11 different countries.
- ❑ The Asian, African, and Inter-American Development Banks have not pledged to limit coal support;
- ❑ Thirty-one of the 33 OECD countries' official Export Credit Agencies have not pledged to limit coal support, with the notable exceptions of the U.S. and France.

2. New Public Financial Institutions

There are a number of emerging infrastructure funds and new public financial institutions that do not have commitments to limit coal support, including the Asian Infrastructure Investment Bank, New Development Bank, and even the Green Climate Fund. As these funds become operational, it will be important to see whether they engage in financing for coal projects.

3. Loopholes for Supporting Coal in Spite of Policy Restrictions

Even with pledges not to finance coal plants except in 'rare circumstances,' there are a number of ways by 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 do not disclose specific projects and include significant amounts of coal finance;
- ❑ Policy, program and infrastructure loans in countries that have significant plans for coal expansion – for example, energy policy lending may support an entire country strategy of coal expansion;
- ❑ Technical assistance that facilitates coal development;
- ❑ New coal power as a sub-component in other industrial projects (e.g. steel plant), where the financing supporting the project also supports the coal plant; and
- ❑ General support for government funds that will finance coal power: even if funds are 'ring-fenced,' the general support to a fund or an instrument perpetuates an entity that prioritizes coal support.



SCOPE OF COAL FINANCE DATABASE AND RESEARCH

This report summarizes the data in the coal finance database available at: www.ShiftTheSubsidies.org/coal. The database includes information about international public finance for coal from OECD countries, China, and Russia from 2007 to 2014.

The database includes information on finance for:

- ② **Coal power plants:** This includes new coal power plants and expansion of existing plants, as well as coal power generation associated with industrial processes;
- ② **Coal power plant emissions controls:** This includes financing for emissions controls on existing coal power plants;
- ② **Coal mining:** coal mining projects and equipment, as well as coal imports and liquefied natural gas production from coal seams⁵;
- ② **Transmission and Distribution:** transmission and distribution directly linked to coal power generation; and

- ② **Other/unspecified projects:** other coal-related finance, including coal export terminals, development policy loans linked to coal, and loans to financial intermediaries supporting coal where the projects supported are unclear.

The database covers financing from the following institutions:

- ② **Major Multilateral Development Banks (MDBs) and Multilateral Finance Institutions (MFIs).** These institutions provide assistance to governments and the private sector. MDB shareholders, or owners, are its member governments. All MDBs are backed by large sums of public money from member governments, which allow them to provide finance to governments and the private sector at lower interest rates and on better terms (e.g. longer tenors) than could be obtained from commercial lenders. The database includes information on coal financing from:
 - ② the World Bank Group (which is made up 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, the European Investment Bank, and the Nordic Investment Bank.

- ② **Export Credit Agencies (ECAs) in OECD countries and China.** ECAs provide government-backed loans, credits, and guarantees for 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. ECAs are also a major source of national debt in developing countries. Most industrialized nations and emerging economies have at least one ECA, which is usually an official or quasi-official branch of government. For OECD countries, we used the OECD list of

⁵ Liquid natural gas (LNG) projects from coal seam methane have been included in the database, but not in this summary report. There is expert debate about the relationship between coal and coal seam (or bed) methane. Some industry experts see a clear and direct relationship between coal seam methane and prolonging the coal industry. Coal seam methane offers industry a profitable way to extract the gas, thus paving the way for mining at a later date. Other experts hold that there is so far no direct relationship proven. Given the debate on this issue, we have included these projects in the database but have not included the amounts in the totals. The projects that are included in the database are: Australia Pacific LNG, Queensland Curtis LNG, and Gladstone LNG in Australia.

⁶ The OECD list of official Export Credit Agencies is available at: <http://www.oecd.org/trade/xcred/eca.htm>



Boilers are seen being installed at the under-construction coal-fired power plant, partially financed by the Japan Bank for International Cooperation, in Kudgi, India. ©AP Photo/Rahi

official ECAs.⁶ The database includes information on coal financing from 22 Export Credit Agencies from 19 countries:

- ☐ Australia's Export Finance and Insurance Corporation (EFIC), Austria's Oesterreichische Kontrollbank AG (OeKB), Export Development Canada (EDC), China Export-Import Bank (China Ex-Im), China Export and Credit Insurance Corporation (Sinosure), Czech Export Bank (CEB) and the Czech Export Guarantee and Insurance Corporation (EGAP), Denmark's Eksport Kredit Fonden (EKF), France's Compagnie Francaise d'Assurance pour le Commerce Extérieur (COFACE), Euler Hermes (Germany), Italy's Servizi Assicurativi del Commercio Estero (SACE), Japan Bank for International Cooperation (JBIC), Nippon Export & Investment Insurance (NEXI-Japan), China

Export Import Bank (Chexim), Korea Export-Import Bank (KEXIM), Korea Trade Insurance Corporation (K-sure), Poland's Korporacja Ubezpieczeń Kredytów Eksportowych (KUKE), Export-Import Bank of the Slovak Republic (Exim SR), Spain's CESCE Credit Insurance (CESCE), Sweden's Exportkreditnämnden (EKN) and AB Svensk Exportkredit (SEK), UK Export Finance (UKEF), and Export-Import Bank of the United States (US ExIm).

- ☐ **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:
 - ☐ Japanese International Cooperation Agency (JICA), German Kreditanstalt für Wiederaufbau (KfW), the China

Development Bank, and the Russian Development Bank (VEB).

- ☐ **Majority State-Owned Banks.** Some countries have banks that operate more like privately held banking institutions, but are owned wholly or in part by the national government.
 - ☐ The Royal Bank of Scotland (RBS), which is majority owned by the United Kingdom, and Chinese state-owned banks Industrial & Commercial Bank of China (ICBC), and Bank of China.

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 provides support for domestic projects, bilateral aid, and export finance. National development banks, such as China Development Bank and Russian Development Bank (VEB),

Box 3. Types of International Public Financial Support for Coal

International support for coal takes many forms, including:

- ② **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.
- ② **Guarantees for Projects.** Guarantees are important catalysts for obtaining project finance. MDBs, ECAs, and other public financial institutions provide insurance to cover the overall risk of an investment at a lower cost and longer tenor (typically for 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, and offtake or payment obligations for state-owned enterprises. These government guarantees transfer private investment risks to the public.

- ② **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.
- ② **Financial Intermediaries.** International institutions are increasingly making investments, including in coal, through financial intermediaries. In a financial intermediary 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 direct project investments, there is often no publicly available information on these individual sub-project 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.

provide domestic financing as well as international financing. There are also bilateral aid agencies such as JICA that may provide loans, grants, policy lending, and technical assistance.

Generally, these institutions provide coal finance internationally, but they sometimes also provide domestic support for coal. These projects are also included in the database when information was available.

The information in the database was collected from a variety of sources and cross-checked with various reports and databases of information:

- ② The Multilateral Development Bank data was collected from Oil Change International's Shift the Subsidies database. CEE Bankwatch Network provided information for the European banks.

- ② The Export Credit Agency and other public finance data was collected from institutional websites, news articles, the IJGlobal database, and OECD documents by the Natural Resources Defense Council, Oil Change International, and World Wildlife Fund, with assistance and feedback from a number of organizations: Japan Center for Sustainable Environment and Society for the Japanese institutions, Korean Federation for Environmental Movement for the Korean institutions, Urgewald for German institutions, The Cornerhouse for U.K. institutions, Pacific Environment and Earthjustice for U.S. institutions, Les Amis de la Terre for French institutions, CEE Bankwatch Network for Czech and Chinese institutions, Both Ends for Dutch institutions.

All types of financial support were included in the database, including direct finance, guarantees, and other types of financing

arrangements, where information was found (See Box 3 for various types of international public finance for coal.)

Attempts were made to contact each financial institution and the OECD Export Credit Group secretariat to provide a chance for clarification or correction of the data prior to publication of this report.

Please see the database for a summary of the responses we received from the institutions.

More detailed information on methodology can be found in Annex 1. Database Methodology and Notes.

COAL FINANCE DATABASE: SUMMARY OF FINDINGS

Total approved public coal finance found between 2007 and 2014 across multilateral and OECD, Chinese and Russian bilateral institutions was \$73 billion. This is likely an underestimate because of the difficulty of accessing data on projects financed for many institutions.

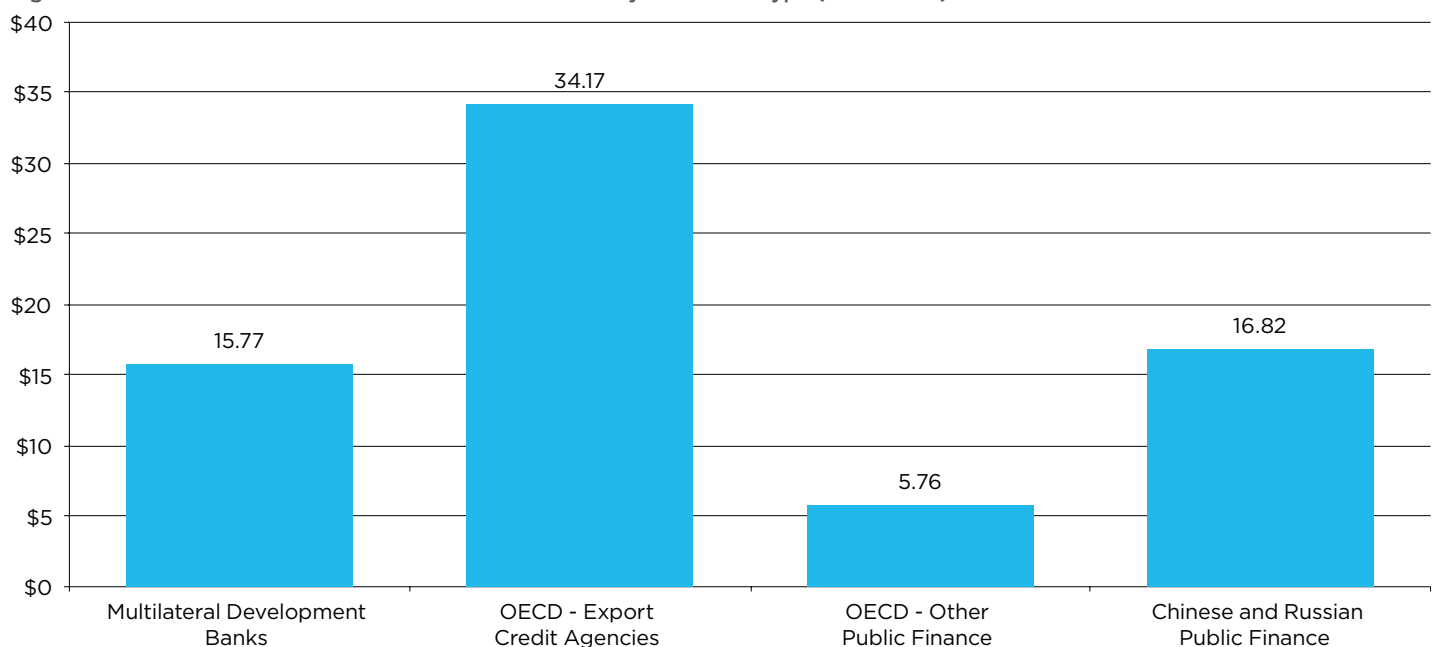
COAL FINANCE BY TYPE OF INSTITUTION AND TYPE OF PROJECT

The coal support provided by OECD official Export Credit Agencies was \$34 billion, providing nearly half (47 percent) of the coal finance identified. The remaining finance came from Chinese and Russian public finance (\$17 billion or 23 percent), Multilateral Development Banks (\$16 billion

or 22 percent) and other OECD public finance (\$6 billion or 8 percent).

The coal support provided by OECD countries, including shares of Multilateral Development Bank lending and bilateral finance in addition to ECAs, was \$49 billion from 2007 to 2014, or an average of \$6 billion annually.

Figure 2. International Public Finance for Coal 2007-2014 by Institution Type (billion USD)

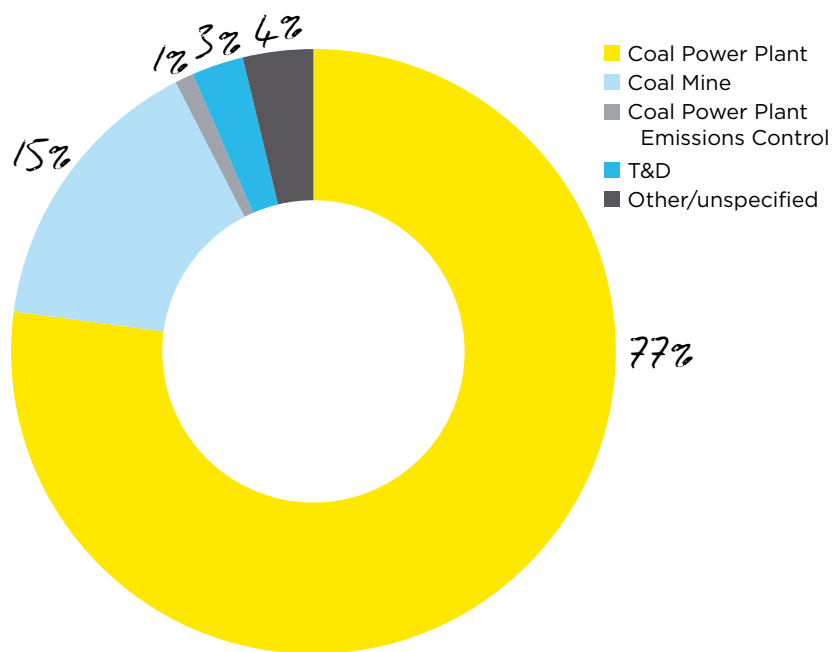


The \$17 billion in non-OECD support found was from China and Russia. We believe that the Chinese data in particular represents partial data, as it is particularly difficult to uncover information about Chinese financing. It is also possible that other countries, such as India, might have financed coal internationally during this time, but we were not able to find information on these transactions.

See Figure 2 for a breakdown of financing by institution type.

The large majority of coal finance went to coal power plants, which made up over three-quarters of the total financing. Lesser amounts went to coal mining, policy loans, transmission and distribution, and other types of projects. See Figure 3 for a breakdown of coal finance by project type.

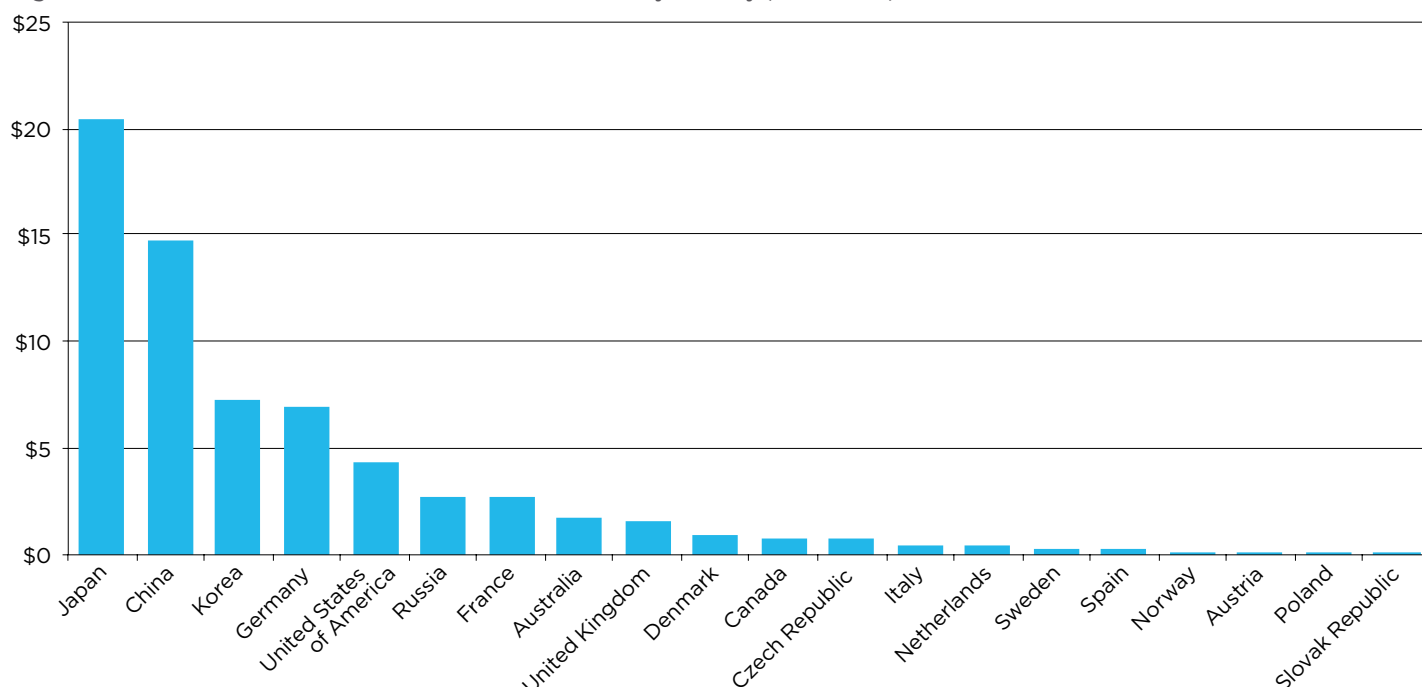
Figure 3. Public Finance for Coal 2007-2014 by Project Type (percent of total finance)



Workers lay cement to build a concrete structure at the under-construction coal-fired power plant, partially financed by the Japan Bank for International Cooperation, in Kudgi, India. ©AP Photo/Rahi



Figure 4. Total International Public Coal Finance 2007-2014 by Country (billion USD)



COUNTRY-BY-COUNTRY

Japanese coal finance (by share of MDB financing, in addition to financing by JBIC, NEXI, and JICA) greatly outweighed finance from any other country. Over the 2007 to 2014 time period, Japan was responsible for financing over \$20 billion in coal projects – 26 percent of total international support for coal. The two Japanese ECAs (JBIC and NEXI) were responsible for 42 percent of OECD ECA finance for coal.

Total Chinese public coal finance was found to be \$15 billion, although this is likely a low estimate, as documented projects are difficult to find at all Chinese institutions reviewed. At the same time, there may be some projects announced by Chinese institutions that did not finally materialize into workable projects.

Total coal finance from Korea and Germany at around \$7 billion each, and the United States at \$4 billion rounded out the top five countries.

Together, these top five countries account for more than 80 percent of the coal finance from the countries reviewed. See Figure 4 for a breakdown of coal finance by country.

Of the financial institutions, the Japanese Bank for International Cooperation (JBIC), the World Bank Group, China Export Import Bank, the Nippon Export & Investment Insurance (NEXI), and Export-Import Bank of Korea (Kexim) provided the largest amounts of financing from 2007 to 2014. See Figure 5 for a breakdown of coal financing by financial institution.

TRENDS IN COAL FINANCE OVER TIME

Total coal finance fluctuated somewhat from year to year, but **the overall trendline decreased over the time period, except from OECD Export Credit Agencies**. The year with the largest amounts of overall public finance for coal was 2009, with nearly \$13 billion in coal finance.

Coal finance bumped slightly up in 2013 but dropped significantly in 2014 – to \$10 billion and \$6 billion, respectively – and most countries appear to have reduced financing for coal in recent years. This trend also reflects the reduction in MDB support for coal.

A clear exception to this is Japan, which continues to finance coal at significant

Figure 5. Financial Institutions Above \$1 Billion in Public Finance for Coal, 2007-2014 (billion USD)

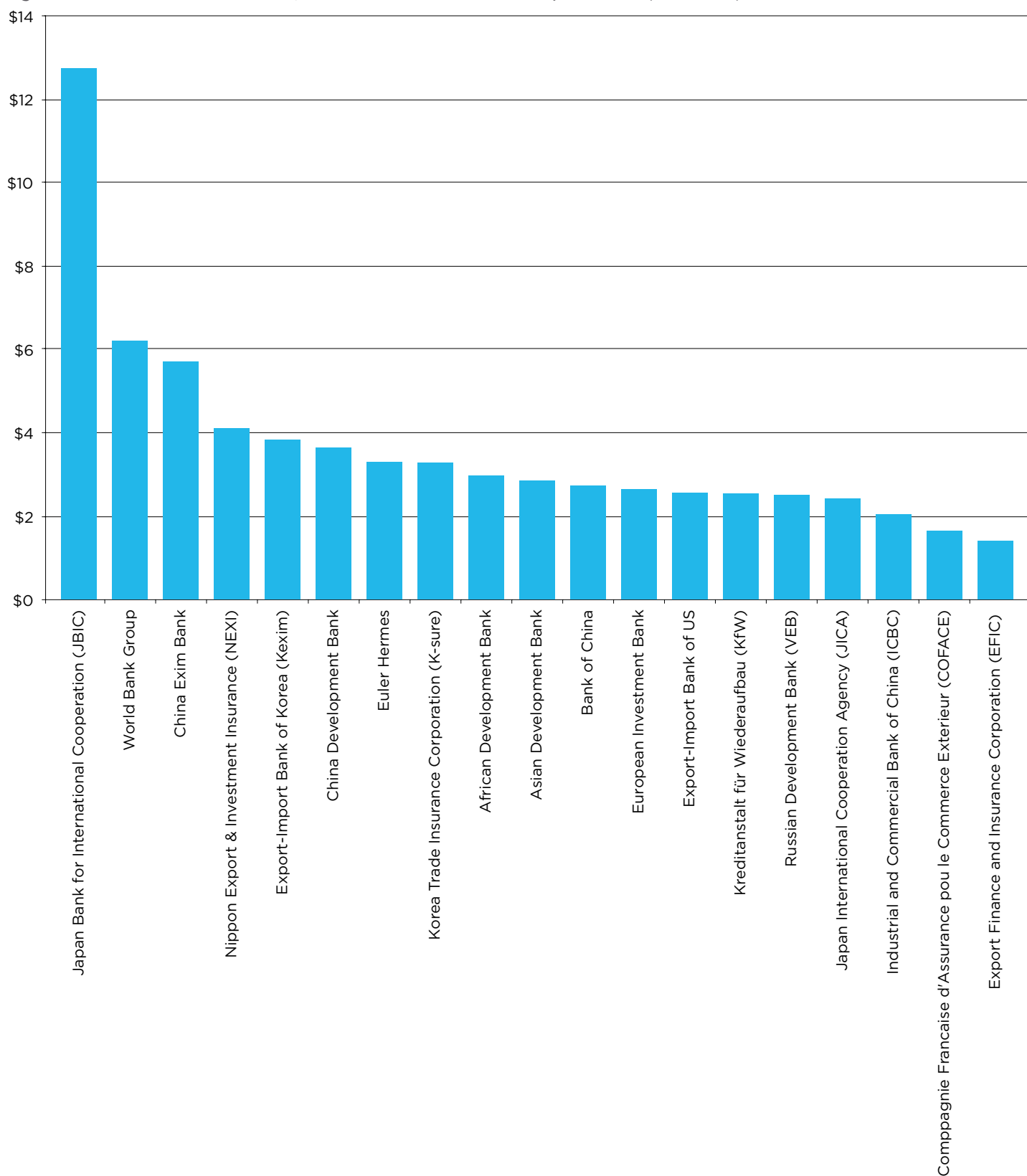
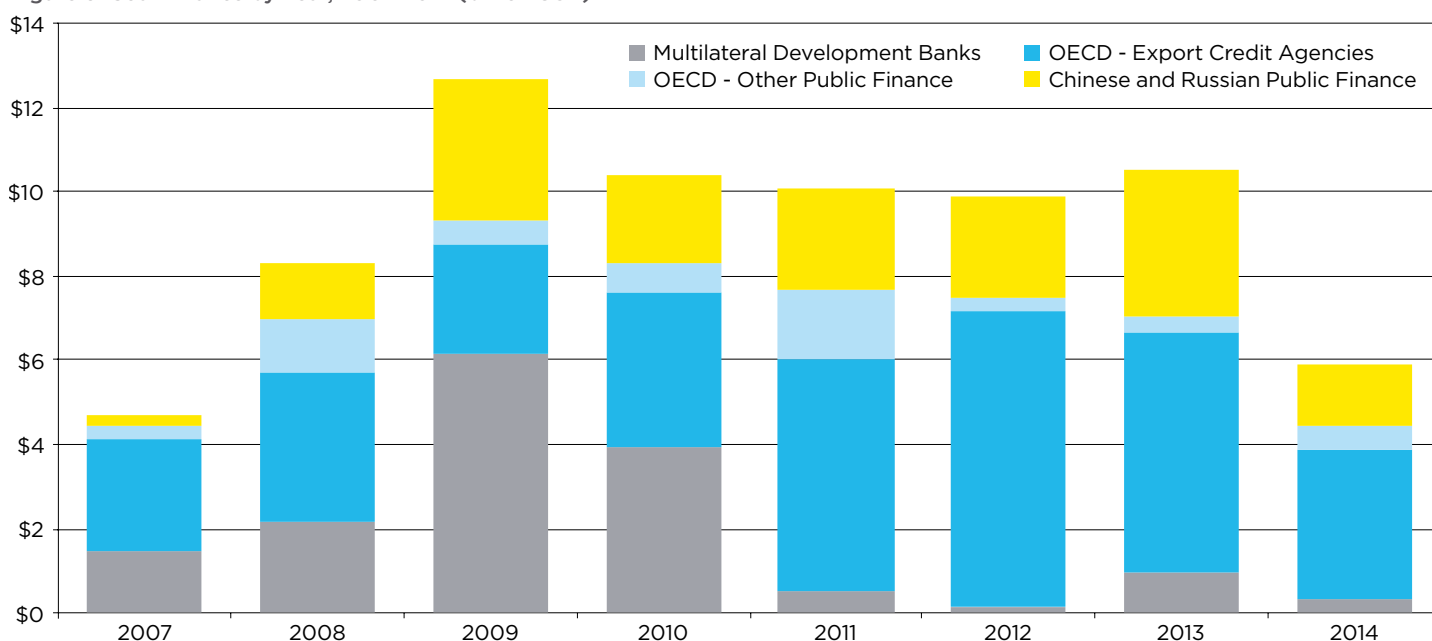


Figure 6. Coal Finance by Year, 2007-2014 (billion USD)



levels. It is as yet relatively unclear if the recent overall drop in coal finance is the beginning of a long-term trend. It is also possible that full information for 2014 projects has not yet been made publicly available yet since it is the most recent year. (See Figure 6.)

A breakdown of financing from the top five coal financing countries shows the greatest amounts of finance in 2012 and financing amounts reducing in 2013 and again in 2014. In the United States, where there has been a pledge to limit overseas coal power plant finance since June 2013, the amount of coal financed dropped significantly in 2014. Japan's coal finance continued to be strong in 2014. (See Figure 7.)

Over time, the source of public coal finance has shifted away from Multilateral Development Banks and towards Export

Credit Agencies and other bilateral finance. (See Figure 8.) This strongly suggests that **Export Credit Agencies (the bulk of bilateral finance) have become the last resort of public support for coal internationally** at a time when a growing number of public financial institutions and countries have ended support for the controversial

GREENHOUSE GAS EMISSIONS FROM PUBLIC COAL FINANCE

Total greenhouse gas (GHG) emissions related to international public finance for coal from 2007 to 2014 amounts to **almost half a billion ton CO₂e per year (441 Mt)**. **To put this number in context, this is as much as the 20th largest emitter globally in 2012, or the total annual emissions of Italy. Emissions are close to a total of 18 Gt for the entire lifetime of the supported**

plants. It should be noted that it is a very conservative order of magnitude given three factors: more than thirty coal plant projects were not included because of the lack of plant size data; emissions from coal mining and infrastructure projects have not been calculated; and the assumptions used for calculating plant emissions (type of coal, type of plant technology, etc.) are conservative.

OECD Export Credit Agencies represent the bulk of emissions (44%), followed by Chinese and Russian public financial institutions (26%), Multilateral Development Banks (20%) and other OECD public financial institutions (10%).

If OECD Export Credit Agencies are analyzed in isolation (without taking account of other public financial institutions and 'sharing' the emissions of joint projects),

Figure 7. Top Five Countries' Bilateral Finance, 2007-2014 (billion USD)

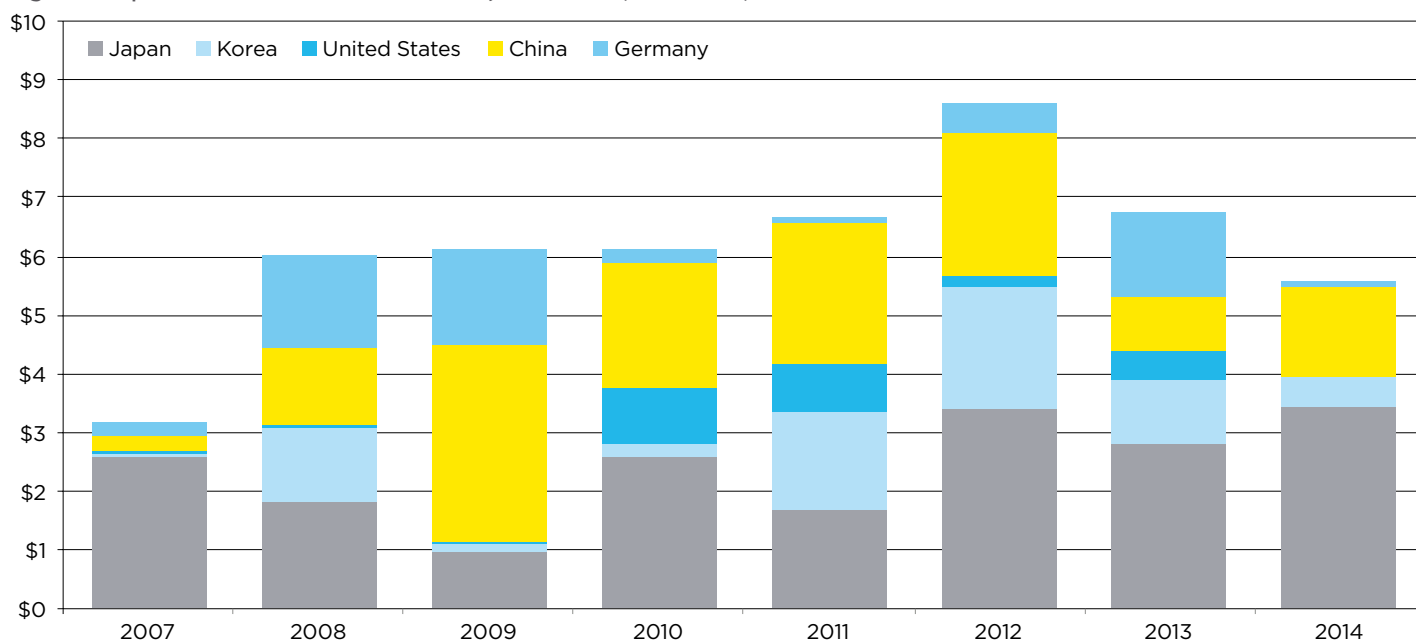


Figure 8. Coal Support from Multilateral Development Banks vs. Bilateral Public Finance (OECD and Non-OECD), 2007-2014 (billion USD)

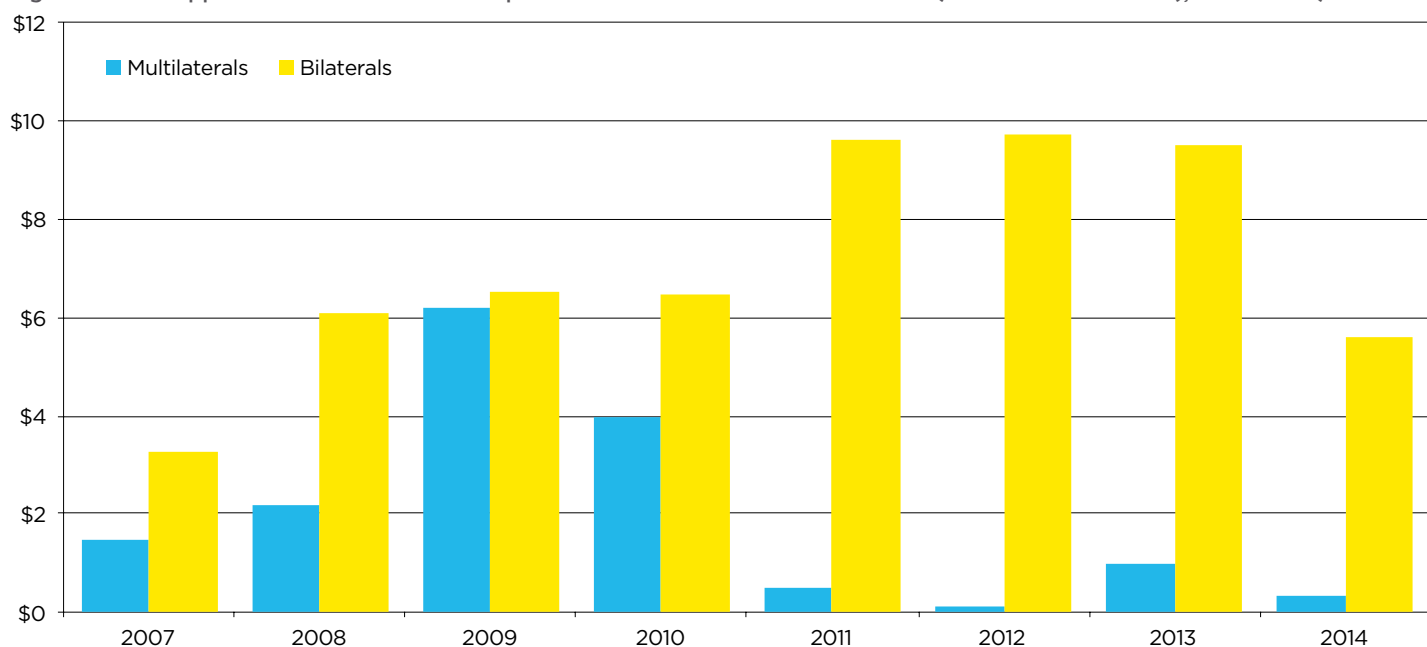


Table 2. ECA-Backed Emissions vs. Overall National Emissions

	ECA-backed emissions (Mt CO ₂ e)	National emissions 2012 (Mt CO ₂ e) (1)	% of national emissions
Japan	98	1268	8%
Korea	66	637	10%
Germany	64	936	7%
U.S.	44	5546	1%
France	43	452	10%

(1) Source UNFCCC, latest year available, <http://unfccc.int/di/DetailedByParty/Event.do?event=go>

they backed projects that represent 237 Mt per year, close to the total annual emissions of the Netherlands.

Taken individually (without taking account of other financial institutions supporting the same projects), the largest OECD Export Credit Agencies backed projects that represent a significant share of their country's national annual emissions – between 7% and 10%, with the exception of the United States. (See Table 2.)

RECIPIENT COUNTRIES FOR COAL FINANCE

Note: This section analyzes the recipient countries of OECD official Export Credit Agencies' (ECA)' support for coal. It does not include MDB support and other public finance institutions (e.g. KfW).

Nearly one-quarter of coal funding from OECD Export Credit Agencies went to High Income Countries. There were 25 recipient

countries of ECA-backed coal projects for the period 2007-2014, including⁸:

- ② 8 High Income Countries amounting to \$8 billion (24 percent of total volume).
- ② 8 Upper Middle-Income Countries amounting to \$8 billion (23 percent of total volume).
- ② 9 Lower Middle-Income Countries amounting to \$17 billion (51 percent of total volume).
- ② 0 Low-Income Countries
- ② In addition, 18 projects were classified at global level or as an unidentified country due to lack of data.

Not a single coal project out of 142 projects in eight years took place in a Low-Income Country (those facing most energy poverty concerns). This rebuts the claim of some OECD governments that their export finance support for coal benefits energy access for the poor. Further, the fact that one-third of OECD export finance for coal went to projects in High-Income Countries

with marginal energy poverty concerns strengthens this assessment: export finance for coal does not target energy poverty.

Among the 11 countries that received \$1 billion or more, three are High Income Countries (they are in yellow in Figure 9).

ECA support for coal in High-Income Countries has increased over the last eight years. A comparison of ECA support in High-Income, Upper Middle-Income and Lower Middle-Income Countries over the eight-year period from 2007 to 2014 finds that the trend line for High Income Countries has increased (See Figure 10) – with the exception of the last year, 2014, which may have incomplete data at this stage. Conversely, the trend line increases more slowly for Lower Middle-Income Countries and Upper Middle-Income Countries stays relatively flat.

7 According to the OECD list, <http://www.oecd.org/trade/xcred/eca.htm>

8 According to the World Bank Country and Lending Groups, http://data.worldbank.org/about/country-and-lending-groups#High_income

Figure 9. Largest Recipient Countries of ECA-backed Coal Finance, 2007-2014 (billion USD)

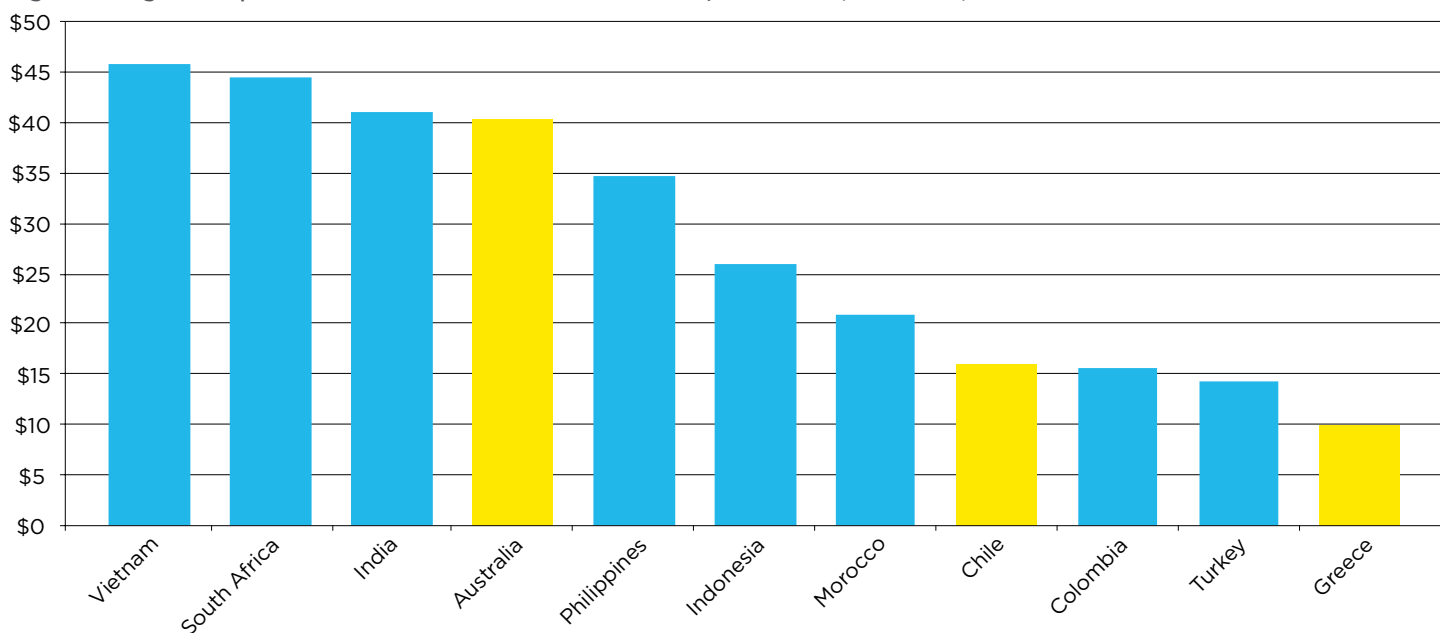
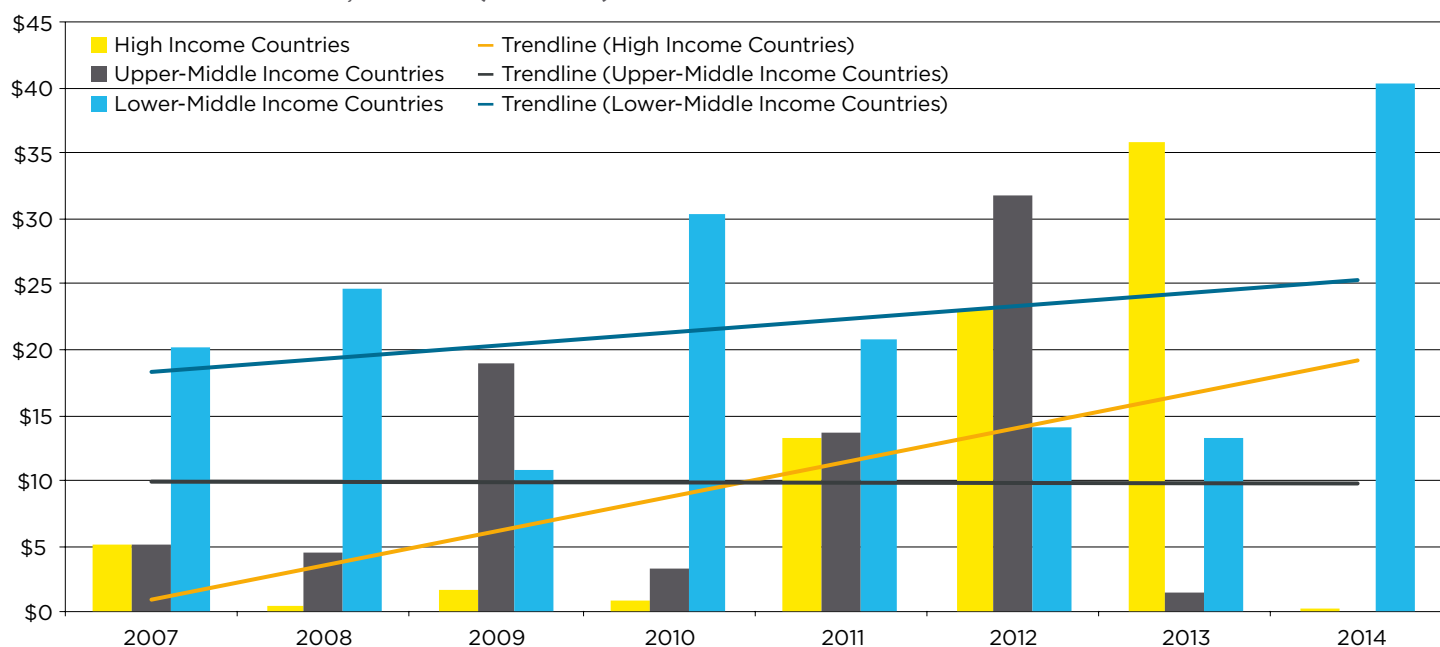


Figure 10. Trends in OECD ECA Coal Finance for Projects in High-Income, Upper Middle-Income and Lower Middle-Income Countries, 2007-2014 (billion USD)



PUBLIC FINANCE INSTITUTIONS LACK BASIC TRANSPARENCY

“The (German) Federal Government is committed to the mission of ensuring transparency in foreign trade promotion. Transparency is essential in ensuring a high quality in discussion, consultation and decision-making, and supports access to the instruments for promoting foreign trade.”⁹

Although welcome, such a statement from the German Ministry of Finance is quite ironic for one of the OECD countries with the worst disclosure of what exports it supports with taxpayer money. Unlike public finance institutions in other countries, KfW lists very few projects publicly, even in response to Parliamentary inquiries.

OECD REPORTING: BILLIONS FOR UNIDENTIFIED FOSSIL FUEL TECHNOLOGIES

In general, Export Credit Agencies acting on behalf of their governments are so secretive that even their official multilateral coordinating body, the OECD Export Credit Group, does not have access to adequate data. In order to provide an overview of

OECD export finance for fossil fuels that was requested by OECD governments, OECD staff reported that they had to conduct intensive internet research to find information on ECA finance by member countries.

Indeed, the OECD Export Credit Group's secretariat explicitly stated that the information reported by OECD countries is quite limited: “A considerable amount of additional work (i.e. beyond the standard review of the data) has been undertaken [...]. In the first instance, this comprised the identification of the power station for which the support was provided (this information was often not provided in Member's submissions).”¹⁰

The lack of transparency is evidenced by the total of \$3.7 billion of fossil fuel support from 2003 to 2013 for which the OECD is unable to report the type of coal plant technology (\$1.2 billion) or even the type of power plant and whether it uses coal, oil, or gas (\$2.5 billion).¹¹

Such a significant amount of support for unidentified fossil fuel technologies indicates how little importance some OECD countries ascribe to the type and efficiency of the fossil fuel power plant technologies they support (and to the OECD reporting).

The list of ‘Coal-fired electric power generation projects with Arrangement export credit financing’¹² established by the OECD shows that almost all countries supporting coal power plants have failed to report the type of technology used in one or more projects, including financing as large as a \$408.5 million Japanese project. This lack of detail occurred in reporting of finance from the Czech Republic, France, Germany, Italy, Japan, Slovak Republic, Spain and Sweden.

Out of 56 coal plant projects listed by the OECD, 27 (48 percent) support an “unknown technology”. This is not only a problem of the past: even in 2013 some projects were supporting unidentified technology.

⁹ Hermes Annual Report 2013, p26, www.agaportal.de/pdf/berichte/e_jb_2013.pdf

¹⁰ OECD, Data on export credit support for fossil fuel power plants and fossil fuel extraction projects, Secretariat, Room Document No.11, paragraph 2, October 2014

¹¹ OECD, Proposals on enhancing reporting for power generation projects and public dissemination, Secretariat, Room Document No.2, 4 March 2015

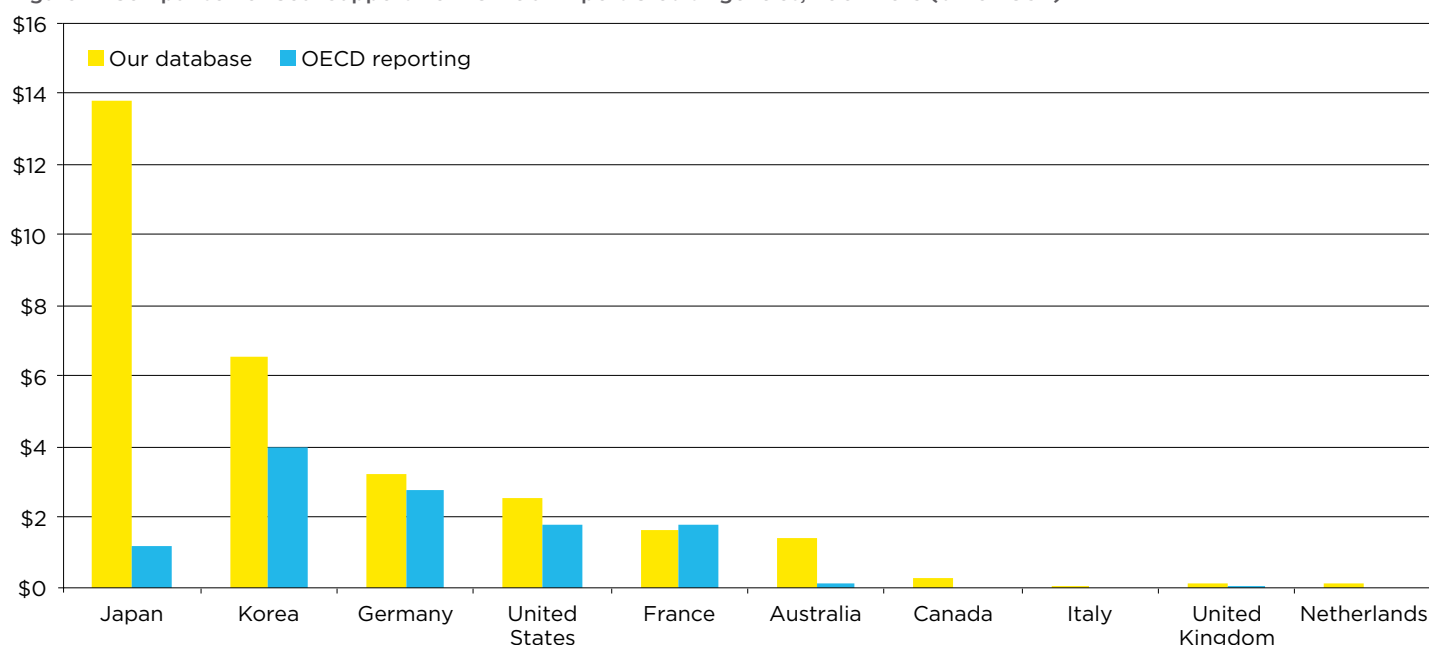
¹² OECD, Data on export credit support for fossil fuel power plants and fossil fuel extraction projects, Secretariat, Room Document No.11, Table 7, October 2014

¹³ <http://www.oecd.org/tad/xcred/theexportcreditsarrangementtext.htm>

Table 3. Coal support from official Export Credit Agencies, 2007-2013 (billion USD)

	Our database	OECD data	OECD data (% of our database)
Australia	1.40	0.15	11%
Austria	0.01	0.01	same
Canada	0.31	0.00	0%
Czech Republic	0.68	0.68	same
Denmark	0.01	0.00	0%
France	1.64	1.78	109%
Germany	3.26	2.80	86%
Italy	0.07	0.00	0%
Japan	13.81	1.21	9%
Korea	6.58	4.00	61%
Netherlands	0.09	0.00	0%
Norway	0.00	0.00	same
Poland	0.04	0.02	54%
Slovak Republic	0.07	0.07	same
Spain	0.00	0.00	same
Sweden	0.02	0.02	same
United Kingdom	0.10	0.01	6%
United States of America	2.52	1.82	72%
Total	30.61	12.56	41%

Figure 11. Comparison of Coal Support from Official Export Credit Agencies, 2007-2013 (billion USD)



DISCREPANCIES BETWEEN OECD REPORTING AND OVERALL PUBLIC FINANCE

The scope of OECD reporting is limited to transactions that are compliant with the OECD Arrangement on Officially Supported Export Credits.¹³ This is only a part of public export finance: according to the OECD Export Credit Group's secretariat, it entirely omits *"financing (including insurance and guarantees) on non-Arrangement terms, including, inter alia, market window export credits, untied export credit insurance, political risk guarantees/insurance (sometimes in relation to equity investments in the project)."*¹⁴ All such public export finance is not reported to the OECD, thus aggregate data and country comparisons omit a large part of the reality. The OECD Export Credit Group secretariat recognizes:

*"From an outsider's perspective, it is understandable that all such support is characterized as "ECA financing"."*¹⁵

The OECD Export Credit Group secretariat gave an indicative order of magnitude of the unreported export finance for coal: in its October 2014 database based on additional research, the OECD compiled a table on non-Arrangement (unreported) projects and found that, although the table is not meant to be comprehensive, it reached the significant amount of \$5.3 billion, *"which is almost half of the credit value reported for Arrangement terms."*¹⁶

When comparing OECD data with our database¹⁷ – based on data from national Export Credit Agencies – **OECD data represents only 41 percent of total**

identified ECA finance, suggesting that OECD reporting is omitting the vast majority of OECD export finance for coal (see Table 3).

Figure 11 shows the countries with the largest discrepancies in data. By volume, the largest discrepancy was Japan (\$12.6 billion difference) followed by Korea (\$2.6 billion difference), Germany (\$1.4 billion difference), Australia (\$1.2 billion difference), and the United States (\$0.7 billion difference). Japan alone represents a bigger discrepancy than all other countries put together. France is the only country where OECD data are slightly higher than in our database.

¹⁴ OECD data on export credit support for fossil fuel power plants and fossil fuel extraction projects, Secretariat, Room Document N°11, paragraph 19 and table 8, 9 October 2014

¹⁵ Ibid

¹⁶ Ibid

¹⁷ For the period covered by both databases: 2007-2013 (not including 2003-2006 and 2014)

LACK OF TRANSPARENCY OF NON-ARRANGEMENT FINANCING, INSTITUTIONS NOT CLASSIFIED AS EXPORT CREDIT AGENCIES AND NON-OECD INSTITUTIONS

For official Export Credit Agencies, as recognized by the OECD, several countries do not report significant parts of their coal support overseas:

- ❑ Japan does not report its (high) support for untied loans, investments;
- ❑ Korea does not report its (high) support for untied loans, investments;
- ❑ Italy does not report a program supporting Italian companies.

Public finance institutions not recognized as official OECD Export Credit Agencies are also very secretive.

It is notoriously difficult to find data for Chinese public financial institutions. It is also notable that Germany does not report support from KfW-IPEX, the international branch of KfW, although the German government defines that “IPEX, a legally

independent subsidiary of the KfW, backs the export and investment activities of German and European firms.”¹⁸ This is the very definition of Export Credit Agencies’ activities. It is quite surprising that KfW, the German development bank and a bilateral aid agency, is among the most opaque institutions in our database.

THE BASIC NEED FOR EXHAUSTIVE REPORTING

The OECD Export Credit Group’s secretariat recognizes as a conclusion of its 2014 document: *“Given the high profile of the climate finance issues, it is hard to argue against having accurate, comprehensive and useful figures on the volume of export credit financing provided by ECAs and the key characteristics of the project supported for all important sectors.”* It adds, *“In this context, Members are invited to consider what steps could be taken to improve the collection and presentation of information on export credit financing, including support that is provided on non-Arrangement terms”* with the following footnote: *“Members will recall that it has already been agreed to provide basic information on export credits provided on market terms (“market window” transactions) via XCR1*

submissions, however only EDC (Canada) has provided any such submissions.”

In its more recent 2015 proposal on reporting and public dissemination, the OECD Export Credit Group’s secretariat notes that *“no figures have yet been published”* and adds *“There would seem to be a pressing need to issue coherent, complete and accurate figures on official export credit support that is relevant to climate change issues and that could inform broader policy discussions.”*¹⁹

In April 2015, more than twelve months after the OECD discussion on export finance for coal started, the OECD has still not released any official data and has not agreed on any disclosure policy for coal finance. But procrastination is not making the issue fade away: it simply discredits OECD countries and the OECD as a whole, as being both unable and unwilling to disclose exhaustive and comparable data on the use of taxpayers’ money for projects fueling climate change.

¹⁸ Federal Government report on the financing of international coal-related projects for the Economic Committee of the Bundestag, December 2014

¹⁹ OECD, Proposals on enhanced reporting for power generation projects and public dissemination, Secretariat, Room Document No.2 paragraph 2, 4 March 2015

CONCLUSION AND RECOMMENDATIONS

Our data finds that public finance has played a significant role in supporting coal projects over the last eight years. In spite of repeated climate commitments by all countries at UNFCCC meetings starting in Copenhagen in 2009 and in each of the subsequent years, and in spite of commitments every year at G20 and other forums to end fossil fuel subsidies significant amounts of public support for coal continue to be provided by nations and international institutions

Hopefully, the drop-off in financing in 2014 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.

A decline in coal finance would be welcome, but the continued finance for oil and gas at much greater levels, as shown by data collected by the OECD²⁰, is cause for concern.

Better data on public finance is a must. As public money, all of this finance should be transparent on a mandatory basis, but as a threat to our planet's health, it is especially critical that governments fully and immediately disclose details of fossil fuel public finance.

To address climate and transparency concerns, OECD countries should:

- ② **Immediately end all international finance for coal** - via Export Credit Agencies (Arrangement and non-Arrangement financing), development banks and agencies, and state-owned banks, except in extremely rare circumstances to support energy access for the poor where no other option is available;
- ② **Phase out international support for all fossil fuel projects**, beginning immediately with projects focused on exploration for more fossil fuels; and
- ② **Immediately disclose exhaustive data on export finance for the entire energy sector**, given its high impact on climate change. Such disclosure should include both Arrangement and all types of non-Arrangement transactions on an annual, country-by-country, and project-by-project basis (including all project-level details needed to provide a clear view of the climate and environmental impacts).

Some governments are choosing to sweep their dirt under the rug, rather than face the necessary task of cleaning their own houses up. But some of the trends are clearly encouraging. If the decline in coal finance indicated in 2014 continues, and an international agreement to end public finance for coal emerges, it would be a welcome first step to curbing public support for fossil fuels. Further, continued support for oil and gas — at much greater levels than coal, as suggested by official data — is the next cause for concern. Public support for all fossil fuels must end in a climate-constrained world.

20 OECD, Data on export credit support for fossil fuel power plants and fossil fuel extraction projects, Secretariat, Room Document No.11, October 2014.



ANNEX 1. DATABASE METHODOLOGY AND NOTES

SUMMARY SHEETS

All totals are based on the sum of the individual projects, except for KfW (see KfW for more details). We have attempted to include “pending” projects but this list is incomplete.

Summary by Institution

For the “Summary by Institution” tab we have summed the project finance at all the institutions in the spreadsheet by sector and by total coal finance.

Summary by Country

For the “Summary by Country” tab we have summed the institutions by country, as some countries have more than one institution that has invested in coal projects.

In addition, we allocated the share of finance through multilateral development banks to those countries based upon their current share of total subscriptions, as documented in the tab titled “World Bank Share by Country”. While these shares change slightly each year, we have used the year 2013 for transparency and ease of calculation. While allocating the share of a project for each year based upon the changing shares at the development banks may be more precise, the values would only minimally change as a result (e.g., they would be within the variation of the exchange rate or rounding when values are presented in billion USD). For more discussion see notes under the “Development Bank Share by Country”.

Summary by Recipient Country

For the “Summary by Recipient Country” tab we have presented the coal finance from the OECD Export Credit Agencies each year, 2007 to 2014, by country where the coal project took place.

Summary by Year

For the “Summary by Year” tab we have presented the coal finance at each institution by sector and by total coal finance for each year, 2007 to 2014.

Emissions

The “Emissions” tab calculates the emissions of coal projects where capacity is known at each institution. The annual emissions for the power plant assume conservative capacity factor, heat rate, and emissions factor. We assume an average capacity factor of 58 percent, a heat rate of 9,057 Btu/kWh, and an emissions factor of 211.9 pounds of CO₂ per million Btu. The capacity factor is based upon the average worldwide rate in 2011, although there are estimates that the actual capacity factor in a number of key countries where investments are occurring are higher. The heat rate is based upon a standard rate for a “supercritical combustion plant”. The emissions factor is based upon a standard rate for “subbituminous coal” even though the quality of coal in some plants is lower or using lignite coal. For more on the methodology and the assumptions see: http://www.sourcewatch.org/index.php/Estimating_carbon_dioxide_emissions_from_coal_plants.

Project scope: Emissions from coal mining, coal infrastructures and coal R&D projects have not been calculated. 32 coal plant projects are not included as the plant size information was missing for them despite our research. All new coal plant are included; for refurbishment/modernization of existing coal plants, they have been excluded when there is a mention that the refurbishment does not prolong the lifetime of the plant (e.g. emissions control), and they have been included in all other cases.

Double counting of emissions has been eliminated by counting each project only once even if it was supported by several financial institutions. In the case of a project supported by several financial institutions, emissions have been allocated equally to the number of financial institutions involved (50% each for 2 institutions, 33% each for three, etc), in order to be able to aggregate results for all financial institutions.

INSTITUTION SHEETS

All documented projects are based on institution websites, public or paid databases, or published reports. We relied on data presented by the institution where available. Some institutions do not make project data readily available. In these cases, we relied on other documented sources.

The database aims to include information on all public finance that supports coal. For most projects, this classification was straightforward as the finance went directly toward a coal plant or mine. In some cases the projects indirectly supported coal power plants or coal mines. Projects were included if they could be reasonably shown to support the coal industry. For example, coal seam methane projects are included where it is reasonable to assume that the project could be supporting coal expansion.

Institution Responses

We attempted to contact each institution included in the database, and the ‘Institution Responses’ sheet compiles the responses we received.

Amount

Currency was converted to USD using standard conversion rates where the source did not list the investment value in US dollars. Data for the Multilateral

Development Banks are based on conversions by Oil Change International in the Shift the Subsidies database, which uses currency conversion the last day of the year the project was financed (using rates from x-rates.com). Currency conversion for all other institutions used the conversion rate to USD on the day denoted (using rates from XE Converter).

Project Name and Source

The hyperlink for the project name shows the document source of the data we have used unless noted in 'Notes' column. Additional sources of information or instances where information is not online are included under the column labeled "other sources." Unless noted in the Notes column or a comment attached to that cell, all data (e.g., project value, power plant size, date, etc.) is based upon the hyperlink on the project name. In any place where we had to make an assumption given the lack of data, we have documented those assumptions in the Notes column for that project or a comment attached to that cell.

Recipient

Where information is available, the recipient of the project financing is shown.

Country

This is the country where the project is located.

Sector

Coal projects are classified into one of several sectors and amounts are tallied in each sheet based on the sector category:

- ❑ **Coal Power Plant:** "Coal Power Plant-New" are projects that support the construction of either a new plant or a new coal-unit (e.g., an additional boiler) at an existing power plant that expanded its capacity. "Coal Power Plant-Existing" are projects that support investments at an existing plant but didn't involve the construction of a new power-unit as far as we could tell. It was not always possible to distinguish the specific project type for some coal power plants so these were documented simply as "Coal Power Plant".
- ❑ **Coal Power Plant Emissions Control:** "Coal Power Plant Emissions Control" are projects financing emissions controls on existing coal power plants

- ❑ **Coal Mining:** "Coal Mining" projects are projects that clearly supported coal mining (i.e., through direct investment in a coal mine, investment in mining equipment). "Coal Mining-Imports" were projects that supported a country in expanding its ability to import coal.

- ❑ **T&D:** "T&D" are projects that supported transmission and distribution where it was clear that the project was supported coal power plants (e.g., the country's electricity sector at the time of the project was dominated by coal power plants or the transmission line was specifically for a coal plant).

- ❑ **Other/unspecified:** Other coal-related finance, including coal export terminals, development policy loans linked to coal, and loans to financial intermediaries supporting coal where the projects supported are unclear.

Power Plant Size

Data on the size of a financed power plant comes from the documented material for the project using the project link. If such data was not available from that source, we have noted in a comment the source of the information on the power plant size.

Coal Mine Size

Data on the size of a financed coal mine comes from the documented material for the project using the project link. If such data was not available from that source, we have noted in a comment the source of the information on the coal mine size.

Approval Date

Attempts were made to document "Pending" projects (finance that has not yet been approved by the institution). Since most organizations don't regularly list pending projects this list should not be viewed as complete. Further, for several documented "pending" projects we were unable to find public data on the expected investment in the project, so these values were not included.

Notes.

Assumptions and additional relevant information on the projects are included in the Notes column.

DEVELOPMENT BANKS

Coal project data for the Development Banks is based on data from Oil Change International's Shift the Subsidies database, available online at: www.ShiftTheSubsidies.org.

Export Credit Agencies and Other Public Finance

All additional coal project data was collected by the Natural Resources Defense Council, Oil Change International, and World Wildlife Fund, with gracious assistance from a number of additional organizations: Japan Center for Sustainable Environment and Society for JBIC & NEXI, Urgewald for KfW and Euler Hermes, The Cornerhouse for UKEF, Pacific Environment and Earthjustice for US EX-IM, Les Amis de la Terre for COFACE. All data errors and assumptions are those of the authors and not of these organizations.

KfW

Since KfW has not provided full detail that allows us to identify total coal investments, we have conservatively used the values that KfW provided to a Parliamentary inquiry on November 8, 2013. We used additional information that KfW provided to a Parliamentary inquiry on March 26, 2015 (for project supported in 2014). The total coal investment reflects the overall amount of coal finance reported by KfW annually from 2007-2013, although it isn't clear whether the KfW report includes coal mining, T&D, etc. The breakout by coal project type only includes values that we were able to compile using publicly available data. The value for "other/unspecified" is the difference between the value KfW reported to Parliament and the individual project breakout that we were been able to compile. Further, there was no overall figure provided for 2014 coal finance, so that year has particularly limited data.

Development Bank Share by Country

This tab breaks down country shares of development banks in 2013. This data is used in the summary sheets to determine the amount of coal lending from development banks that each country is responsible for.

ANNEX 2.

ADDITIONAL

INSTITUTION NOTES

KfW

Kreditanstalt für Wiederaufbau

(KfW) banking group is Germany's public development bank, which finances projects inside and outside the country. KfW's international banking is divided into KfW IPEX Bank, DEG, and KfW Development Bank. KfW's funding comes from the federal budget and the main client of the development bank is the Federal Ministry for Economic Cooperation and Development (BMZ). In addition, the European Commission and the governments of other countries also commission KfW to implement their development cooperation programs and projects. Recently, KfW Development Bank finally started to publish information about its projects. Many of the coal projects, however, have been funded through KfW IPEX-Bank, which does not provide project information in sufficient detail to identify total coal investments (see notes in Annex 1.)

Korea Trade Insurance Corporation (K-sure)

Founded in 1992, K-sure provides export and import insurance in South Korea and internationally. The insurance system is a policy tool to facilitate financing for Korean importers and exporters. Abroad, it provides several types of risk

insurance, including through a specific overseas natural resources development fund insurance. K-sure was formerly known as Korean Export Insurance Co. and changed its name to Korea Trade Insurance Corporation in 2010 to include an import insurance scheme which aims to secure commodities and natural resources (including coal) that the government deems vital to South Korea's economy.

Chinese Financial Institutions

China Development Bank (CDB) and the Export-Import Bank of China (Chexim), along with the Agricultural Development Bank of China, are "policy" banks. These policy banks were established in 1994 to take over the government-directed spending functions of the big four state-owned commercial banks (ICBC, Bank of China, China Construction Bank and the Agricultural Bank of China). The policy banks are responsible for financing economic and trade development and state-invested projects, and to support the policies laid out in the State Council's Five-Year Plans.

Industrial & Commercial Bank of China (ICBC) and the Bank of China (BOC) are two of the big four China state-owned commercial banks. The Bank of China and

the ICBC specialize in foreign exchange transactions and trade finance. Both work jointly with Chexim to provide export credit insurance and low-cost finance for exports. In addition to various types of guarantees, the Ministry of Finance and the Ministry of Commerce delegate Bank of China to exclusively undertake the letter of guarantee business under a special central government fund for overseas construction.

Russian Development Bank (VEB)

The "Bank for Development and Foreign Economic Affairs" or Vnesheconombank (VEB) is a Russian state-owned bank. VEB extends government credits and guarantees for projects inside Russia and abroad with payback periods exceeding 5 years and total value exceeding 2 billion rubles (approximately US\$58 million). In addition, **CJSC Roseximbank** and the **Export Insurance Agency of Russia (EXIAR)** are responsible for extending government guarantees to support exports. VEB is Roseximbank's majority shareholder and EXIAR's sole shareholder. It is very difficult to obtain information on VEB's finance activities. Press releases on the VEB website and general searches involving VEB, Roseximbank, and EXIAR are starting points for research.

