

LOCKED OUT OF A JUST TRANSITION

FOSSIL FUEL FINANCING IN AFRICA

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EXECUTIVE SUMMARY

While the impacts of the climate crisis are already disproportionately affecting African countries, the continent is also host to an increasing number of fossil fuel developments. These fossil fuel developments will further drive climate change and harm local communities and the environment, and risk locking African countries into fossil fuel dependency and preventing them from making a timely leap to renewable energy. These fossil fuel projects operate with financial support from across the world.

This report shows the scale of financial support provided by commercial banks, development finance institutions and Export Credit Agencies (ECAs) that flowed to the fossil fuel industry in West, Central, East and Southern Africa in the period between 2016, the year in which the Paris Agreement entered into force, and the end of June 2021. In addition, it highlights the private and public-sector financial institutions most responsible for these flows.

Our research found **782** fossil fuel projects in operation or under construction in West, East, Central and Southern Africa, with a further **111** projects announced, proposed or permitted, between 2016, the year in which the Paris Agreement entered into force, and the end of June 2021. Also in this time, **71** projects were shelved, although these may become viable again in the future. These **964** fossil fuel projects are owned or supported by **406 companies**, the majority headquartered in Europe, the United States and China.

The vast investments being ploughed into the fossil fuel sector are also undermining the enormous potential of Africa's renewables. According to Carbon Tracker, the African continent has 39% of the world's potential for renewable energy. Yet Africa and the Middle East together receive only 2% of investment into renewable energy annually. Instead, financial institutions keep providing large amounts of finance to the fossil fuel industry in the region, ignoring people's need for affordable and clean energy and Africa's huge renewable energy potential, and undermining the urgent need for a Just Transition.

FINANCE

We examined direct finance for **58 fossil fuel projects** as well as general purpose finance for **24 fossil fuel companies** provided between 2016 and June 2021.

- Public and private sector financial institutions poured at least \$132.3 billion into fossil fuel companies and projects in Africa in this period. This includes \$82.5 billion in corporate finance for fossil fuel companies and \$49.8 billion in direct finance for fossil fuel projects.
- Of the top 15 financial institutions behind this sum, 10 are commercial banks and five are public finance institutions.

- The majority of the largest fossil fuel financiers are from North America and Europe, in particular from the United States, the United Kingdom and France. JPMorgan Chase, Standard Chartered and Barclays are all in the top 5.
- The largest single financier of fossil fuel projects and companies in Africa in this period is the **China Development Bank**.
- In all, the vast majority of finance for fossil fuels in Africa flows from the Global North. Financial institutions from North America, Europe and Australia provided \$72.5 billion of the finance between 2016 and mid-2021. Finance from Asian financial institutions, mostly from China and Japan, makes up \$41.8 billion of the total amount. In contrast, African financial institutions only provided \$15.4 billion.

FIGURE ES 1: OVERALL TOP 15 FINANCIAL INSTITUTIONS, FOSSIL FUEL PROJECT & GENERAL CORPORATE FINANCE,

BETWEEN 2016 - JUNE 2021 FOR 58 PROJECTS AND 24 COMPANIES IN WEST, EAST, CENTRAL AND SOUTHERN AFRICA SELECTED FOR THIS REPORT

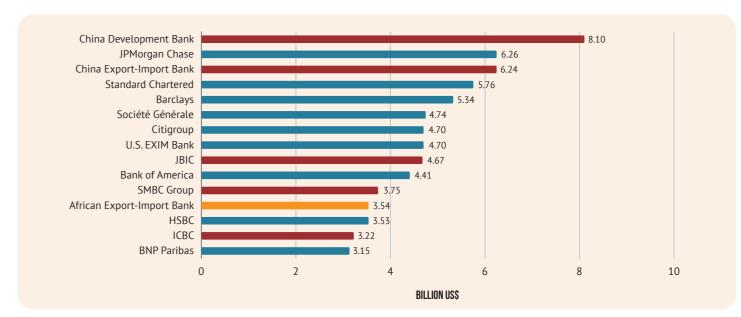
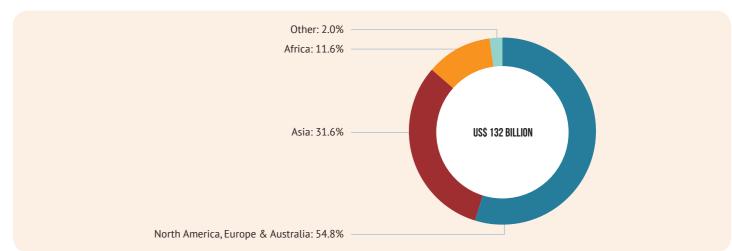


FIGURE ES 2: OVERALL PROJECT & CORPORATE FINANCE BY REGION, BETWEEN 2016 - JUNE 2021

FOR 58 PROJECTS AND 24 COMPANIES IN WEST, EAST, CENTRAL AND SOUTHERN AFRICA SELECTED FOR THIS REPORT



IMPACTS OF FOSSIL FUEL PROJECTS **IN AFRICA**

The fossil fuel industry and its financiers continue to market ongoing and new fossil fuel extraction as an important driver of development, claiming that it will create public revenues, jobs and energy access for the world's poorest nations. However, poor contract terms, debt traps, and disproportionate ownership by foreign multinationals means the industry mainly serves the interests of companies and nations outside of Africa, with African people and governments bearing the risks.

With most of the region's coal, oil and gas being exported, these developments also are not addressing the energy poverty faced by millions of Africans. New projects risk locking countries into fossil fuel dependency. In the next ten years, new oil and gas projects to the value of \$230 billion are at risk of becoming stranded assets. Combined with growing national debt and government deficits, these could generate a dangerous ripple effect leading to massive unemployment and rising poverty, locking countries into a vicious cycle of poverty for decades to come.

Instead of bringing development, fossil fuel projects often have severe impacts on local communities and the environment, leading to displacement, loss of access to land and water, and consequently loss of food security. Consultation processes are not taking place or are not done properly, and women are often not included in consultation processes. The jobs promised seldom materialise or are only short term. Pollution caused by oil spills and gas flaring has severe consequences for health, water and ecosystems. And of course, fossil fuel developments contribute to climate change, which in turn disproportionately affects African communities.

The impacts and risks described in the report are demonstrated in the projects highlighted in the report. These highlighted projects are:

- Medupi coal power plant in South Africa
- West African Gas Pipeline / Nigeria Morocco Gas Pipeline
- Offshore Cape Three Points in Ghana
- Nigeria LNG
- Malicounda oil-fired power plant in Senegal
- Mozambique LNG

- East African Crude Oil Pipeline (EACOP) in Uganda and Tanzania
- Oil and gas drilling in the Okavango River Basin in Namibia & Botswana
- Sengwa coal power plant in Zimbabwe
- Oil and gas in the Virunga landscape in the Democratic Republic of Congo

RISKS FOR FINANCIAL INSTITUTIONS

The fossil fuel industry and its financiers continue to market The fossil fuel industry is also increasingly becoming a risky business for financial institutions themselves. Systemic weaknesses, including unsustainable levels of corporate debt, are already present in the industry, and intensified during the COVID-19 pandemic and the oil price crash in 2020. All new oil, gas and coal projects are at risk of becoming stranded assets, along with some projects already in operation. Climate change litigation is on the rise, and the risk of reputational damage is enhanced by the lack of transparency, corruption, illicit financial flows, and record of severe environmental and human rights violations endemic to the industry. Further, a failure to limit global warming will present a systemic threat to the whole global financial system.

A JUST TRANSITION

A transformational Just Transition approach towards renewable energy, rooted in environmental, social, political, economic and gender justice, is urgently needed if the injustices that have plaqued the African continent for so long are to be addressed and reversed. A Just Transition requires transforming the current energy system. The way fossil fuel resources have been extracted, managed, distributed and used has not economically benefited Africans and has had severe ecological, socio-economic and political impacts in African countries. The same could easily happen to the abundant renewable energy potential that Africa harbours, if it follows the same economic model of exploitation.

As such, this report puts forward a set of Principles for a transformative Just Transition approach to renewable energy that includes:

- a total and immediate ban on new fossil fuel projects and a managed but rapid phase-out of finance for existing fossil fuel projects and companies;
- · investment in knowledge and skills so African communities benefit from the continent's huge renewable energy potential;
- renewable energy that is people-owned and controlled, and is shaped around the notion of energy as a right;
- renewable energy projects that respect democratic and participative decision-making and adhere to FPIC principles and ensure appropriate compensation and remuneration for affected communities:
- making land rights central, in order to avoid repeating the injustices of the fossil fuel extractivism paradigm;
- the need for climate justice to be paired with gender justice, with women treated as important stakeholders within energy systems;
- protection for the rights of workers in all aspects of the renewable energy system, including the right to freedom of association and collective bargaining, a living wage, and safe, secure and dignified work; and
- the need for African ownership, including community ownership, of renewable energy, so profits generated from African renewables can directly benefit African people.

To pay for this Just Transition requires that wealthy nations fulfil their climate finance commitments, provide debt relief and reparations for historic injustices.

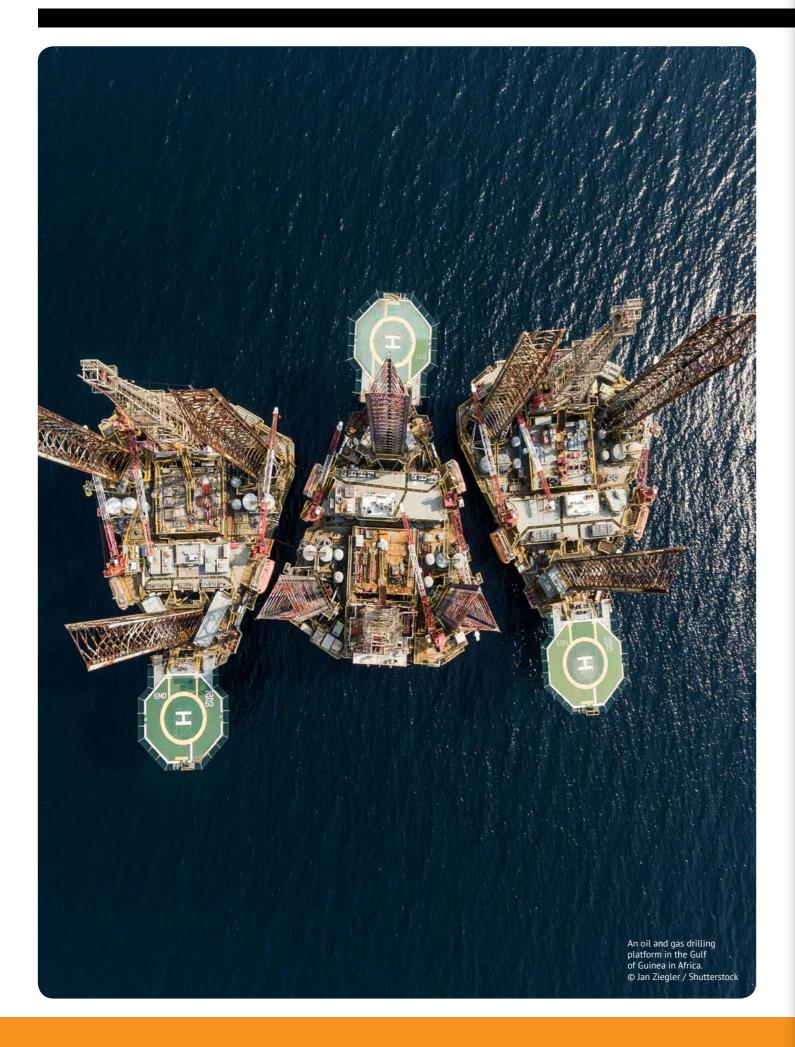
SUMMARY OF RECOMMENDATIONS

Based on our findings, we present the following recommendations for public and private-sector institutions and regulators:

· Stop financing fossil fuels: Public and private sector financial institutions should immediately end all financing for fossil fuel expansion projects and for all companies expanding fossil fuel extraction and infrastructure, phase out existing fossil fuel support, and re-direct support towards decarbonization and Just Transition efforts.

- Improve accountability for fossil fuel financing and support: Governments and public finance institutions should strengthen transparency by publicly disclosing support for fossil fuels, including progress in relation to any phase out commitments made. Private sector banks should also publicly disclose their finance for fossil fuel projects and companies, factoring client consent into standard loan agreements to make this possible.
- Legislate for human rights and environmental due diligence, and for 1.5°C: Governments need to legislate nationally and regionally for mandatory human rights and environmental due diligence (mHREDD) that ensures companies including financiers prevent and address violations. They must also legislate to oblige corporations – including the financial sector – to align their portfolios to the Paris Agreement objective to limit global warming to 1.5°C.
- Provide support and finance for renewable energy according to Just Transition principles: A Just Transition for Africa means that financiers - both public and private - need to finance a more socially owned, renewable energy powered, worker and community empowered, climate positive and democratic future.
- Ensure exploitative and extractivist practises are not reproduced in the renewable energy sector: financiers need strong environmental and human rights due diligence covering their support for renewable energy projects, which includes a gender lens and address the needs of the poor and vulnerable communities.
- **Ensure African countries and communities benefit from the** renewable energy resources they hold: If not addressed, the current economic system will continue to create an energy framework that puts foreign companies first and local people last, with millions of Africans continuing to live in material and energy poverty, despite Africa's abundant renewable energy potential.

A just and equitable transition for Africa cannot happen without addressing the unfair economic, trade and investment rules which continue to uphold global inequities. By wealthier nations meeting their climate finance commitments, cancelling Africa's rising debts, addressing tax avoidance and tax evasion and illicit financial flows, and providing reparations for historic injustices, they can lay an important financial foundation for Africa's timely transition to a green, resilient and sustainable economy.



1. INTRODUCTION: THE FOSSIL FUEL LANDSCAPE IN AFRICA

The message from scientists is alarming and clear: the window for action to stay within 1.5°C of global warming and to prevent even more catastrophic climactic events is narrowing quickly. The gravity of the climate emergency has been tirelessly called out by Indigenous and front-line communities for decades and the impacts of the climate crisis become more apparent every day. This is especially the case for African countries, which are already disproportionately feeling the effects of climate change. Yet the continent is also host to an increasing number of fossil fuel developments which will further drive climate change and harm local communities and the environment.

These fossil fuel projects operate with financial support from across the world. This continued financial support for fossil fuel projects in Africa will not only exacerbate climate change and harmful environmental and community impacts, it also risks locking in fossil fuels and preventing African countries from making a timely leap to renewable energy. This lock-in effect has severe economic, social and political risks, which also further undermine African countries' resilience to address the disproportionate impacts of climate change.

The aim of this report is to show the scale of both private and public finance that flowed to the fossil fuel industry in West, Central, East and Southern Africa in the period between 2016, the year in which the Paris Agreement entered into force, and

the end of June 2021. It investigates both direct finance for fossil fuel projects, and general-purpose finance for fossil fuel companies with significant operations in the region, as provided by commercial banks, development finance institutions and Export Credit Agencies (ECAs). In addition, the report highlights the private and public-sector financial institutions most responsible for these flows.

As this report shows, a substantial part of this support comes from the Global North, with the highest amounts coming from financial institutions based in the US and Europe, followed by financial institutions based in China and Japan. While private and public financial institutions in these countries are keen to portray themselves as financing the transition, especially at home, most of them continue to pour billions of dollars into the development and expansion of fossil fuels in Africa.¹

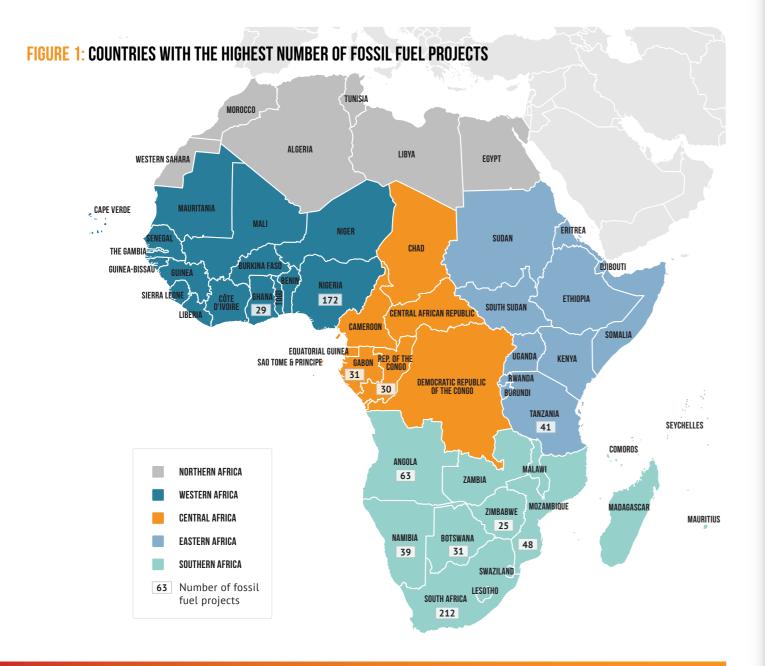
This report argues that instead of continuing to support the fossil fuel industry in Africa, public and private-sector financial institutions alike can and should play a role in supporting a Just Transition and a people-centred future for Africa. A Just Transition can be defined as a shift from an extractive fossil fuel-based economy to a renewable regenerative economy while addressing existing economic and social inequalities and employing principles of inclusivity, transparency and democracy. Chapter 8 further elaborates on these Just Transition Principles.

FOSSIL FUEL PRODUCTION & EXPANSION

Since the Paris Agreement came into force in 2016, fossil fuel companies, many from outside of the African continent, have been expanding their operations in Africa, with the ongoing support of public and private financial institutions. According to our research, the period between 2016, the year in which the Paris Agreement entered into force, and the end of June 2021 saw 782 fossil fuel projects in operation or under construction in West, East, Central and Southern Africa,² and a further 111 projects announced, proposed or permitted there.

The period also saw **71** projects shelved. However, projects halted in the wake of the oil price crash and during the COVID-19 pandemic might become viable again in the future.³ In fact, fossil fuel demand has already picked up again and has even exceeded pre-COVID-19 highs.⁴

The fossil fuel projects are spread over 38 countries. The countries with the highest number of projects are depicted in Figure 1 below.⁵



The fossil fuel industry has no intention of winding down production in these regions. On the contrary, a report by Oil Change International (OCI), *The Sky's Limit Africa: The case for a just energy transition from fossil fuel production in Africa*, demonstrates that the industry plans to sink another \$1.4 trillion into exploring and developing new oil and gas developments in Africa by 2050.⁶ Despite a downgrade in production, plans for extracting 69 billion barrels of oil, 335 trillion cubic feet of gas (the equivalent of 56 billion barrels of oil), and 5.8 billion tonnes of coal in the next three decades remain in place.

More than 90 per cent of the expansion of oil and gas extraction in Africa is expected to take place in 16 countries: Nigeria, Algeria, Libya, Egypt, Mozambique, Angola, Republic of Congo, Mauritania, Tanzania, Ghana, Equatorial Guinea, South Africa, Senegal, Gabon, Uganda, and Ethiopia. Many of the countries in which the expected expansion will take place are so-called "newcomer countries", with little or no current oil and gas extraction. These countries are particularly at risk of being locked into fossil fuel dependency, as set out in Chapter 4. This includes several of the countries featured in this report – including Mozambique, Uganda, and Senegal. When it comes to coal, 87% of the production in the next two decades is projected to take place in South Africa, with some new mines planned in Mozambique, Zimbabwe, and Botswana.⁷

Oil and gas extraction projects make up the majority of the fossil fuel projects covered in this report, followed by coal power plant projects (see Table 1). A large part of the expansion of the fossil fuel industry in Africa is expected to be in the gas sector, following gas discoveries in the Indian Ocean off the coasts of Mozambique and Tanzania, in the Atlantic Ocean near the Senegal-Mauritania border, and elsewhere. In addition, oil and gas developments are expected to increasingly take place in riskier remote and offshore areas, including deep-water areas, and make growing use of unconventional methods such as fracking.⁸

TABLE 1: NUMBER OF FOSSIL FUEL PROJECTS IN AFRICA BY TYPE⁹

Project type	Number
Oil extraction projects	413
Gas extraction projects	364
Coal power projects	248
Fossil fuel infrastructure projects (pipelines, terminals)	118
Coal mining projects	65
INCLUDES DECIFICE IN OPERATION LINDER CONSTRUCTION ANNOUNCED DECECTOR	DMITTED OD

SHELVED IN WEST, EAST, CENTRAL AND SOUTHERN AFRICA DURING THE PERIOD 2016 - JUNE 2021

OWNERSHIP IS CONCENTRATED IN COUNTRIES OUTSIDE OF AFRICA

The **964** fossil fuel projects covered by this report are owned or supported by **406 companies**. The majority of the projects are run by companies headquartered outside of Africa, which means the profits flow out of Africa. These include companies from the Global North, such as TotalEnergies, Eni, Chevron, ExxonMobil, Shell, BP, Equinor, Perenco, and Marathon Oil, and companies from China such as China Petroleum & Chemical Corporation (Sinopec), China National Offshore Oil Corporation (CNOOC) and China National Petroleum Corporation (CNPC). The African fossil fuel companies involved in the largest numbers of projects are those from established producer countries, including Eskom from South Africa, the Nigerian National Petroleum Corporation (NNPC), the Nigerian Petroleum Development Company (NPDC), Sonangol from Angola, Ghana National Petroleum Corporation, and Société Nationale des Pétroles du Congo (SNPC).¹⁰

Ownership is expected to remain concentrated in the hands of non-African companies, with 61% of projected production in Africa from 2020–2050 being controlled by European, Asian, and North American companies, compared to 33% by African companies. Just four companies, TotalEnergies, Eni, ExxonMobil and BP, are expected to be responsible for 30% of the projected expansion.¹¹

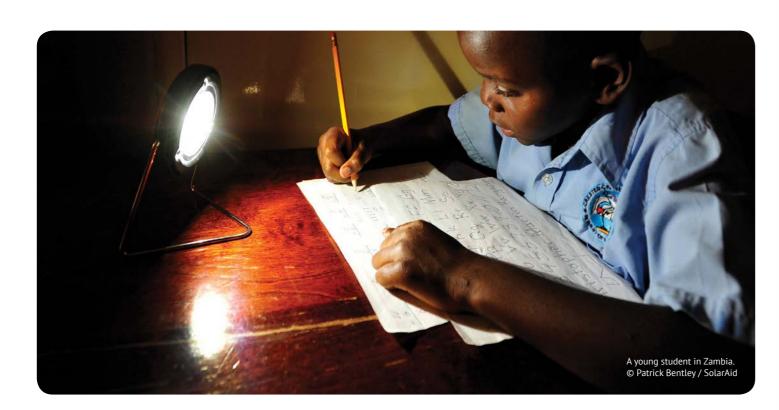
UNEQUAL BENEFITS, UNDERMINING AFRICA'S RESILIENCE

Many public and private financiers, fossil fuel companies and governments justify their ongoing support for fossil fuel projects by stating that they are contributing to Africa's development.¹² However, reality shows a different picture. Despite its massive fossil fuel resources, Africa remains the continent most plaqued by energy poverty. Energy poverty can be defined as a lack of household access to electricity and clean cooking facilities (e.g. fuels and stoves that do not cause air pollution in houses).13 Out of the world's 800 million people living in energy poverty, 600 million are living on the African continent. Also, 900 million people in Africa still rely on traditional biomass for cooking, with severe environmental and health impacts as a consequence, especially for women.¹⁴ Even countries with high levels of fossil fuel production often do not provide better energy access to their citizens. For example, oil-rich Nigeria, Africa's biggest fossil fuel exporter, has the largest energy access deficit in the world. 15 Even after over 65 years of oil exploration, only 55% of Nigerians had access to electricity in 2019.16

Despite this immense energy poverty problem, almost all current oil, gas and coal production on the African continent is destined for export, not for domestic use, and this is not expected to change under current projections. While there

are a large number of proposals for new pipelines, ports, gas liquefaction plants and other infrastructure designed to facilitate export, there are only a few projects that aim to build plants and infrastructure needed for generating electricity or fuel for domestic use.¹⁷ Africa's fossil fuel reserves are not being used to address Africa's energy poverty.

The 'fossil fuels bring development' argument not only contradicts reality, it also disregards the evidence that renewable-based alternatives can increasingly provide a cheaper, more accessible, inclusive and reliable source of energy than fossil fuels.¹⁸ In addition, the vast investments being ploughed into the fossil fuel sector are undermining the enormous potential of Africa's renewables. According to Carbon Tracker, the African continent has 39% of the world's potential for renewable energy.¹⁹ Yet, most of the wind and solar power generating capacity expected to come online in the EMEA (Europe, Middle East and Africa) region between now and 2030 will be in Europe, according to information from Energy Monitor. Plans see only 27 GW in wind power being added in Africa and the Middle East, compared with 290 GW in Europe, and only 68 GW of solar power, compared with 152 GW in Europe by 2030. Overall, 85% of Europe's planned energy capacity is clean, compared to only 57% in the Middle East and Africa.²⁰ Financiers could be seeking opportunities to address this inequality, rather than contributing to it with additional fossil fuel finance.



THE ROLE OF FINANCIAL INSTITUTIONS

The support of financial institutions plays a significant role in determining which energy projects get built. Right now, they are driving the imbalance and playing an active role in undermining African countries' chance for a Just Transition. This includes providing direct finance to fossil fuel projects or credit to fossil fuel companies in the form of general corporate loans, revolving credit facilities and underwriting services. It also includes buying shares in or holding bonds of fossil fuel companies. In addition to providing finance, Export Credit Agencies (ECAs) can support fossil fuel developments by backing loans from commercial banks to fossil fuel projects to guarantee repayment. Lastly, financial institutions can act as financial advisors to fossil fuel projects, helping ensure they get the finance they need to proceed.

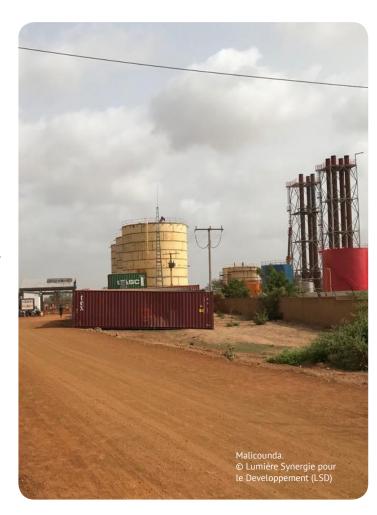
The financial institutions covered in this report are commercial banks, multilateral, regional and national development banks, and ECAs. Commercial banks provide financial services like lending to companies on a commercial for-profit basis. Multilateral development banks can be international or regional in scope and are established by groups of countries with the proclaimed goal of enhancing development, largely in the Global South. National development banks exist for the same purpose but are set up by the government of only one country. ECAs are governmental or quasi-governmental institutions that provide trade finance, including project finance, and services like loan guarantees and insurance to facilitate the operation of domestic companies abroad, especially for high-risk projects.

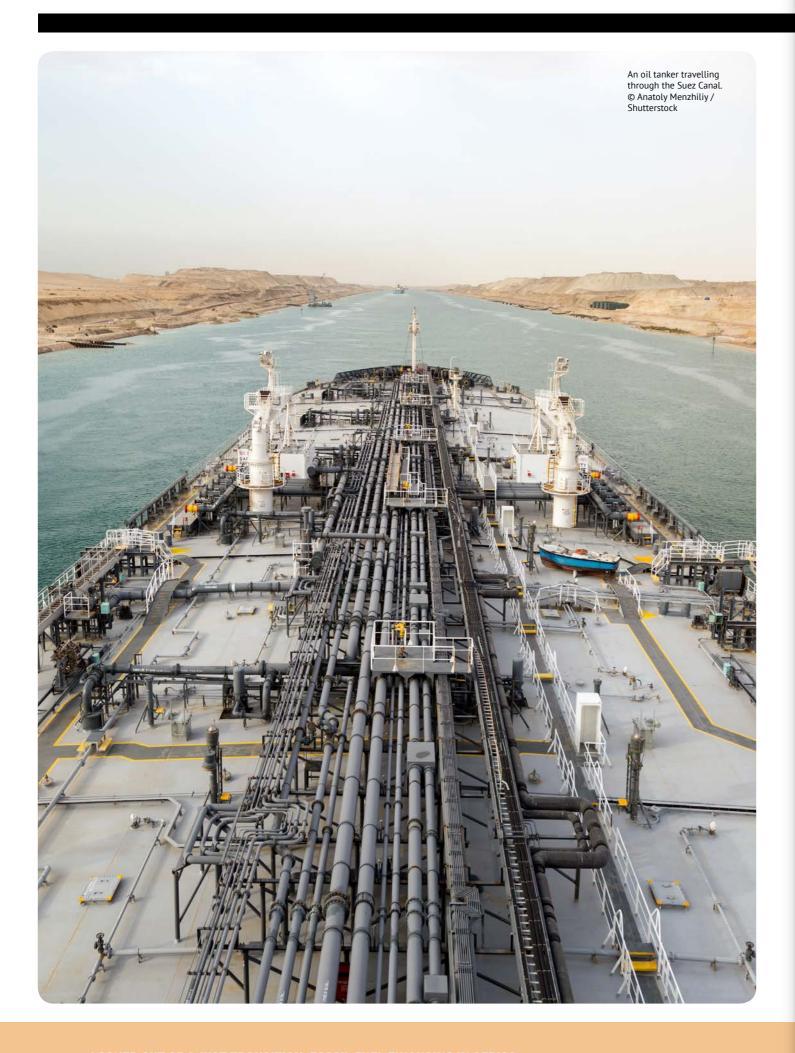
Public finance – whether through loans, services or guarantees – can also have a catalysing effect on private investments. Being government-backed, public financial institutions often have high credit ratings, whereas their involvement is also often seen as politically backed support for the project at hand, and so their support can significantly lower the risks and costs for other financiers to step in. As such, every dollar of public finance going to fossil fuels has an outsized impact, attracting more private-sector finance.

As this report shows, all of these financial institutions support the continuation and expansion of fossil fuel developments in Africa, while they should be facilitating a just energy transition.

OUTLINE OF THE REPORT

Chapter 2 sets out the methodology used in our research for this report. Chapter 3 examines the scale of recent finance for the fossil fuel industry in Africa, from both public and private sector institutions, and shows which financial actors are most responsible for fueling fossil fuel developments in the region. Chapter 4 sets out some of the risks and impacts associated with fossil fuel projects in Africa, for communities, the environment, the climate, and the producing countries. **Chapter 5** explores some of the risks for the financial institutions themselves of continuing to finance fossil fuels. Chapters 6 and 7 highlight a number of concrete fossil fuel projects, already financed or still seeking finance, and their actual and potential impacts on local communities and the environment. Chapter 8 sketches principles for a Just Transition and the future that African civil society organisations see for their countries, and how financial institutions can play a role in realising this future. Finally, Chapter 9 sets out our recommendations for public and private-sector institutions and governments.





2. METHODOLOGY

AIM AND SCOPE

This report's aim is, first, to show the scale of both private and public finance that flowed to the fossil fuel industry in West, Central, East and Southern Africa between 2016 and the end of June 2021. In addition, the report aims to expose the private and public-sector financial institutions that were most responsible for these flows. We furthermore aim to show the impacts and risks of fossil fuel projects in Africa in general as well as in specific highlighted fossil fuel projects. Lastly, this report sketches principles for a Just Transition and the future that African civil society organisations see for their countries and makes the case for how financial institutions can play a role in realising this future.

The report takes 2016 as a starting point, as the year in which the Paris Agreement entered into force, and we finished data gathering for this report in June 2021.²¹ It looks at both finance for specific fossil fuel projects in these regions, and finance for fossil fuel companies with significant operations in the region. See below for more details of how these projects and companies were selected.

The West, Central, East and Southern regions of Africa were chosen as the focus of the report, with the exclusion of North Africa, primarily due to the focus and location of the authors' partner organisations.²² Projects that are partly situated in North Africa, such as a pipeline running from Morocco to Nigeria, are however included in this report.

GENERATING THE LIST OF FOSSIL FUEL PROJECTS AND SPONSORS IN SCOPE

To produce a comprehensive list of fossil fuel projects announced or financed since 2016, we compiled a database using information from Global Energy Monitor (for infrastructure, LNG terminals, coal mining and coal power plant projects) and Rystad (for oil and gas extraction projects). The database thus compiled includes a total of 964 projects in East, West, Central and Southern Africa. The database also contains information on the project sponsors that operate these projects, and an analysis of the number of projects in which each sponsor is involved. In all, there were 406 fossil fuel companies involved in these fossil fuel projects between 2016 and the end of June 2021.

Since it was not feasible to analyse financial information for all 406 fossil fuel companies, a selection of fossil fuel companies for which finance research would be carried out was made based on an analysis of the number of projects per company, and the volume of oil and gas production in the regions in scope per company (using information from Rystad). Companies in the top 20 in terms of involvement in the largest number of projects or with the largest volume of oil and gas production were selected. In addition, a small number of additional companies were selected because of their national importance or size, or the scale of their involvement in certain sectors such as coal mining. For some of the companies selected, no corporate finance information was available.

The final selection of 24 fossil fuel companies for which corporate finance information was available comprises Africa Oil Corporation, BP, Chevron, China National Offshore Oil Corporation (CNOOC), China National Petroleum Corporation (CNPC), Eni, Equinor, Eskom, Exxaro Resources, Exxon Mobil, Galp, Ghana National Petroleum Corporation, Glencore, Kosmos Energy, Marathon Oil, New Bright International Development, Nigerian National Petroleum Corporation (NNPC), Sasol, Shell, Sinopec, Sonangol, TotalEnergies, Tullow and ZESA holdings. These 24 fossil fuel companies act as project sponsor for 479 out of the 964 projects in the database (49.8%).

RESEARCHING THE FINANCE FOR THE SELECTED PROJECTS AND COMPANIES

The next stage of our research was to identify the flows of finance to the companies and projects identified. We investigated finance and financial support from private and public actors, including commercial banks, development finance institutions and Export Credit Agencies (ECAs).

Firstly, we investigated direct finance to **fossil fuel projects** in West, Central, East and Southern Africa between 2016 and June 2021. Information was gathered from the IJGlobal database and the Oil Change International's Shift the Subsidies database which covers G20 country ECAs, development finance institutions, as well as major multilateral development banks was also consulted. This database looks for energy finance at the institution level and includes data from institutions' own reporting as well as IJGlobal, media, and partner organisation sources.²⁴ Using both databases a list of transactions for 58 fossil fuel projects in the period between 2016 and June 2021 was compiled. See Appendix 1 for the 58 fossil fuel projects. This transaction information was used to analyse the amounts of public and private finance provided to fossil fuel projects, the financial institutions that played a role as financial advisors in certain projects, and the amount of finance that was backed by ECAs.

Secondly, we investigated non-project-specific finance for **fossil fuel companies**, in the form of general corporate loans, revolving credit facilities and underwriting services provided between 2016 and June 2021 to the 24 companies selected. Investments in the form of share- and bond holdings are not covered in this report. Information was gathered using financial databases – Refinitiv (formerly known as Thomson EIKON), Bloomberg – as well as TradeFinanceAnalytics, annual reports, company websites and other company publications, company registry entries where available, and media archives.

Since these companies typically operate both in- and outside the geographical and sectoral scope of this report, the resulting credit figures were adapted using adjusters, to reach an estimate of the amount of finance that could reasonably be attributed to fossil fuel operations in the regions covered by this report. These adjusters were calculated using a combination of segment (fossil fuels) and geographic adjusters (focus region). Segment adjusters were developed for all companies, for every year financing was identified. That is, the proportion of each company's business activities related to fossil fuels was

calculated for the year in which a financial relationship was identified. Segment adjusters were developed using segment reporting in annual reports complemented by information from company publications and websites, as well as estimates where necessary. The following financial indicators were used in order of preference:

- Segment capital expenditures/ additions to non-current assets;
- Segment liabilities;
- Segment assets;
- Segment revenues; and
- Segment profit/loss.

Geographic adjusters were developed for all companies and for every year financing was identified to adjust for activities in multiple countries. A similar approach was used to calculate geographic adjusters as segment adjusters. Where financing was identified at the subsidiary level, the location of the activities was identified using company publications. Where financing was identified for a financing vehicle, the group-level adjuster was applied. Geographic adjusters were developed using segment, geographic and general reporting in annual reports complemented by information from company publications and websites, as well as estimates, where necessary. Geographic adjusters were applied to segment adjusters. The following financial indicators were used in order of preference to calculate geographic adjusters:

- Geographic capital expenditures/ additions to non-current assets;
- Geographic liabilities;
- · Geographic assets;
- Geographic revenues; and
- · Geographic profit/loss.

While the selection of 24 companies represents a large proportion of the fossil fuel projects identified in the regions in scope for this report, this report cannot present credit information for all fossil fuel companies operational in these regions. In addition, there may be projects that our research did not identify, and not all finance provided within the scope of this report may be captured by the databases and other sources we have used. Therefore, the total amount of fossil fuel finance identified in this report is almost certainly an under-estimate.

GEOGRAPHICAL ORIGIN OF THE FINANCE: ASSUMPTIONS AND DISCLAIMER

This report also attempts to provide insight into the geographical origin of the fossil fuel finance provided. In order to come to such an analysis, for commercial banks, national development banks and ECAs, we made the assumption that their finance originated from the same region as their headquarters.

As such, the finance figures from regional development institutions come with a disclaimer. Part of the funding and member contributions of regional development banks comes from members outside the region. For example, the African Development Bank (AfDB) allows up to 40% of its subscription money to come from non-African shareholders; and 14.8% of the shares of the African Export-Import Bank (Afrexim Bank) are held by non-African investors.²⁵ Therefore, part of the project finance provided by these institutions is likely to have originated from outside the continent in which they are headquartered. However, we considered it reasonable to include these institutions in the analysis on the geographical origin without adjustment, albeit with this disclaimer, particularly since the majority of each institution's funding still comes from the region in which it is headquartered, and because regional members still have majority vote (e.g. African members have 60% of the voting power in the AfDB).

Finance from multilateral banks such as the World Bank Group, New Development Bank (NDB), Islamic Development Bank and the OPEC Fund for International Development is left out of the calculations for the geographical origin altogether, and is included in the "other" category, because the majority of their funding cannot be pinpointed to one region.

THE SELECTION AND RESEARCH OF THE HIGHLIGHTED PROJECTS

The 10 highlighted projects in this report were written together with partner organisations from the Democratic Republic of Congo, Ghana, Mozambique, Nigeria, Togo, Senegal, South Africa, Uganda, Zimbabwe, and Botswana. These partner organisations have a strong track record working with local communities around the impacts of fossil fuel developments, ranging from documenting and monitoring to public awareness raising, community mobilisation and (inter)national advocacy.

The highlighted projects were selected based on partners' preference and focus while also taking into account the scope of this report. For the projects that have already received finance (in Chapter 6), we checked whether finance was provided between 2016 and June 2021, or if there had been any new developments on the project that needed investments in the same period. For the projects that had not received finance yet (Chapter 7), we selected only projects for which at least some form of project activity took place in the period covered by this report.

The cases were drafted using a variety of sources, including scientific journal articles, civil society reports, environmental impact assessments, company reports and websites, news articles, and community interviews and reports. The partners received a set of questions as guidelines, which sought information on the socio-economic, human rights, environmental and climate impacts of the fossil projects. Gender impacts were also included in the set of questions, to ensure that differentiated impacts on women and girls are captured.

Due to the COVID-19 outbreak, which was ongoing during the research period, the partners conducting research on the highlighted projects faced constraints in terms of community interviews, which meant that face-to-face contact was not always possible. Where face-to-face interactions took place, these were conducted in compliance with the COVID-19 protocols as prescribed by the World Health Organisation and relevant governments.

The partners received a questionnaire addressing the historic origins of fossil fuel injustices, as well as their perspectives on a Just Transition to renewables and key principles to achieve this. African publications on a Just Transition, such as 350Africa's "Position Statement on a Just Transition"; the "Just Transition Open Agenda" by the Life after Coal Campaign; "A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda"; "The Sky's Limit Africa: The case for a just energy transition from fossil fuel production in Africa"; and "A Just Recovery Renewable Energy Plan for Africa" also provided an important background and input to the chapter on the Just Transition (Chapter 8).²⁶



3. FINANCING FOR THE FOSSIL FUEL INDUSTRY IN AFRICA

The historic and structural inequality in the ownership of fossil fuel production and in renewable energy investment, described in the Introduction, further finds its way into financing of fossil fuels in Africa. While private and public financial institutions in the Global North are increasingly making pledges to finance the transition and to reduce their financed emissions to Net Zero by 2050, they continue to pour billions of dollars into the development and expansion of fossil fuels, particularly in African countries and other regions of the South, where the costs are lower, and the voices of the people impacted are perceived as more distant and less powerful.²⁷

In addition, African countries receive much less finance for developing renewable energy compared to countries in the Global North. Worldwide, Africa and the Middle East receive only 2% of investment into renewable energy annually.²⁸ According to the Oil Change International, "Shift the Subsidies Database", G20-country international public finance institutions and the major multilateral development banks provided only \$13 billion of public finance for renewable energy in Africa, 3.7 times less

than the support given to fossil fuels, in the four years following the Paris Climate Summit (2016-2019).²⁹ Instead, financial institutions keep providing large amounts of finance to the fossil fuel industry in the region, ignoring people's need for affordable and clean energy and Africa's huge renewable energy potential, and undermining the urgent need for a Just Transition.

This chapter aims to give an idea of the scale of financing for the fossil fuel industry in West, Central, East and Southern Africa and to highlight which financial institutions are most responsible for fuelling the industry.

The chapter first looks at direct finance for 58 fossil fuel projects provided between the Paris Agreement in 2016 and the end of June 2021. It then looks at the finance for fossil fuel companies provided in the same period to a selection of 24 of the biggest companies that operate in the region. The chapter concludes with a look at the total fossil finance provided, and an analysis of the financial institutions that provided the highest amounts of finance.



FINANCE TO FOSSIL FUEL PROJECTS

Project finance refers to long-term debt usually provided by a syndicate of banks, which can only be used to finance a specific project, such as a mine, pipeline, or power plant plant. In such cases, a direct link can be drawn between the lender and the particular project and its impacts.

Between 2016 and the end of June 2021, financial institutions have funnelled **\$49.8 billion** in total into the 58 fossil fuel projects covered in this report. The finance for the **Mozambique LNG project** makes up a large part of this sum, receiving a whopping \$15.8 billion from 25 different financial institutions. The **Coral South FLNG project** in Mozambique, the **Kusile coal power plant** in South Africa, and the Nigeria LNG project are next in line, having received \$4.7 billion, \$2.5 billion and \$2.4 billion respectively.

Many projects receive a mix of public and private sector finance. Below we look in more detail at the involvement of, firstly, private sector banks, and secondly public-sector financial institutions, in financing African fossil fuel projects.

PROJECT FINANCE FROM PRIVATE-SECTOR BANKS

The commercial banks in this study provided a total of **\$20.7 billion** in project finance to the 58 projects in scope during the report period. Asian banks, mostly from China and Japan, provided **\$8.6 billion**. European and North American commercial banks provided **\$8.3 billion**, with French and UK banks taking up the biggest chunk. African banks, in majority from South Africa and Nigeria, provided a further **\$3.5 billion**.

In terms of largest financiers, Industrial and Commercial Bank of China (ICBC) and Bank of China firmly take first and second place. Sumitomo Mitsui Banking Corporation (SMBC) ranks third and is joined by its Japanese peers Mizuho and Mitsubishi UFJ Financial Group (MUFG) in sixth and eighth place. European banks also make the top five, led by French bank Société Générale and Standard Chartered from the UK. South Africabased Standard Bank is the only African bank in the top 10 and comes in seventh place.

FIGURE 2: PRIVATE-SECTOR PROJECT FINANCE BY REGION, BETWEEN 2016 - JUNE 2021 FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS

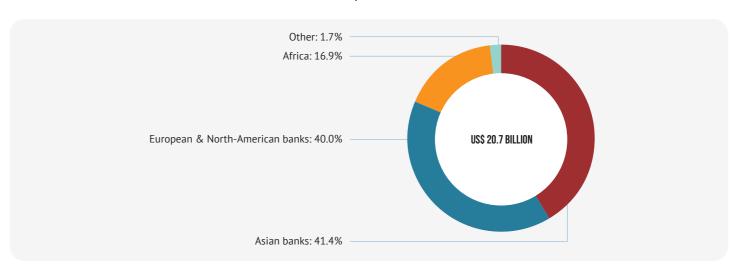
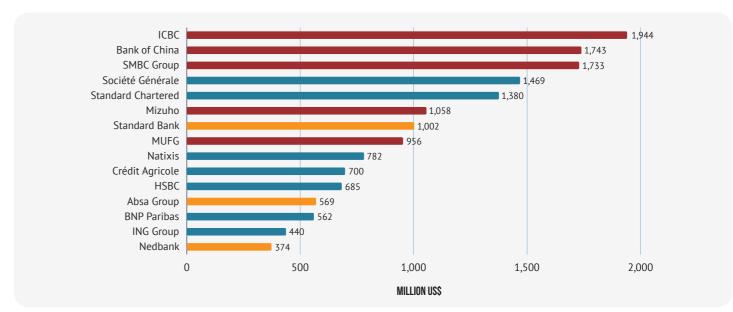


FIGURE 3: TOP 15 PRIVATE-SECTOR BANKS, PROJECT FINANCE, BETWEEN 2016 - JUNE 2021 FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS



TO SEE THE ENTIRE LIST OF PRIVATE-SECTOR BANKS THAT PROVIDED PROJECT FINANCE BETWEEN 2016 AND THE END OF JUNE 2021, SEE APPENDIX 2.

PROJECT FINANCE FROM PUBLIC-SECTOR INSTITUTIONS

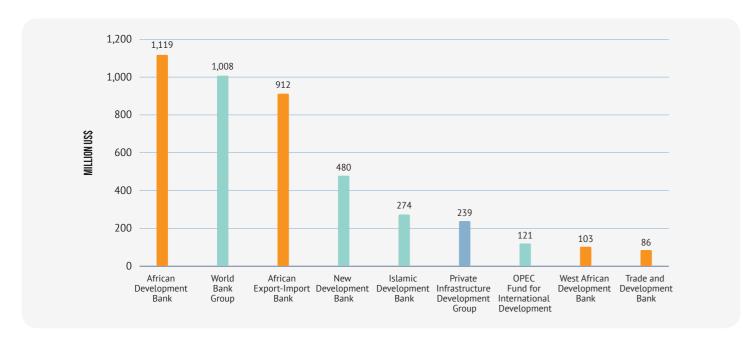
Public sector financial institutions providing project finance to fossil fuel projects in Africa include both national and multilateral development finance institutions and Export Credit Agencies (ECAs). The first sections cover the project finance provided by public financiers. The separate section on ECAs details the support they offered in the form of loan guarantees. Together, public financiers funnelled **\$29.1 billion** of direct finance into the 58 fossil fuel projects in scope between 2016 and the end of June 2021.

MULTILATERAL FINANCIAL INSTITUTIONS

The nine multilateral development banks in the figure below have provided a total of \$4.3 billion of project finance. Just over half of this finance was provided by African-based development banks, with the African Development Bank (AfDB) topping the chart. The World Bank Group is next in line, followed by the African Export-Import Bank (Afreximbank).

FIGURE 4: PROJECT FINANCE PROVIDED BY MULTILATERAL FINANCE INSTITUTIONS, BETWEEN 2016 - JUNE 2021

FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS



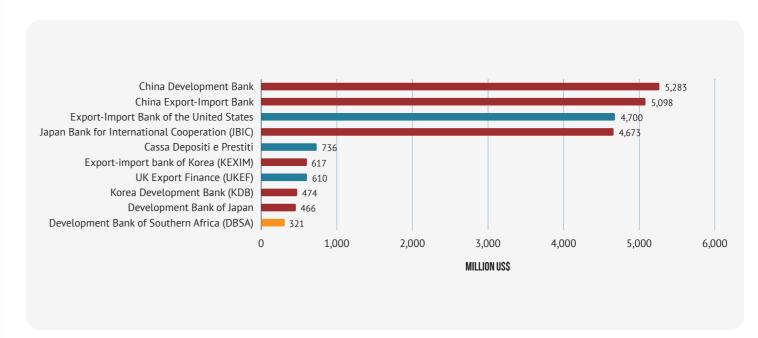
NATIONAL FINANCIAL INSTITUTIONS

The list of national financial institutions that provided project finance in the same period is a bit longer and includes 21 institutions who together were responsible for \$24.8 billion in fossil fuel project finance to African countries. Asian development institutions, particularly the China Development Bank, China Eximbank and Japan Bank for International

Cooperation (JBIC) have picked up most of this, \$16.7 billion. Due to a large contribution from the Export-Import Bank of the United States, finance from institutions from North America and Europe made up \$7.3 billion of the total. The share of African national development banks was negligible.

FIGURE 5: TOP 10 NATIONAL FINANCE INSTITUTIONS, PROJECT FINANCE, BETWEEN 2016 - JUNE 2021

FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS



TO SEE THE ENTIRE LIST OF NATIONAL FINANCE INSTITUTIONS THAT PROVIDED PROJECT FINANCE BETWEEN 2016 AND THE END OF JUNE 2021, SEE APPENDIX 3.



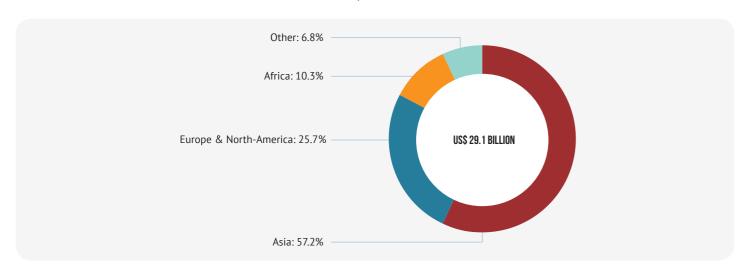
PROJECT FINANCE FROM PUBLIC-SECTOR INSTITUTIONS CONTINUED

PUBLIC-SECTOR PROJECT FINANCE BY REGION

The origin of the project finance provided by multilateral and national finance institutions together follows a similar pattern as with the commercial banks. Asia-based institutions financed fossil fuel projects to the tune of \$16.7 billion, followed by \$7.5 billion from European and North American institutions, while finance from Africa-based institutions again forms a much smaller part, in this case \$3 billion between 2016 and June 2021. These figures come with the disclaimer that part

of the funding of regional development banks often comes from members outside the region. Finance from the World Bank Group, New Development Bank, Islamic Development Bank and the OPEC Fund for International Development is left out of the calculations for the geographical origin altogether and is included in the "other" category because the majority of their funding cannot be pinpointed to one region.³⁰

FIGURE 6: PUBLIC SECTOR PROJECT FINANCE PER REGION, BETWEEN 2016 - JUNE 2021 FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS



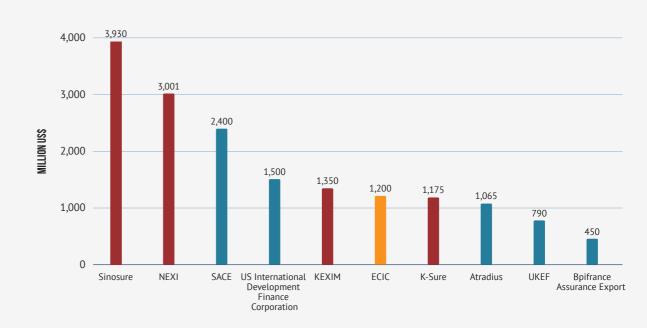


ROLE OF EXPORT CREDIT AGENCIES (ECAS)

Besides providing loans, ECAs can also play a role in terms of backing loans from commercial banks by guaranteeing repayment. By providing these guarantees, they support companies to operate abroad in economic or 'politically risky' circumstances, which is often the case when it comes to fossil fuel projects. This creates an enabling environment for private finance to flow towards fossil fuel development. The terms of these guarantees are often more generous than what commercial institutions can offer.

In the period covered by this research, nine ECAs covered \$16.9 billion worth of loans. Most of this amount was for the Coral South FLNG and the Mozambique LNG projects. Of the total amount, \$9.5 billion was backed by Asian ECAs Sinosure from China, Nippon Export Investment Insurance (NEXI) from Japan, and Korea Export-Import Bank (KEXIM) and Korea Trade Insurance Corporation (K-Sure) from Korea. The \$6.2 billion covered by European countries comes mostly from Servizi Assicurativi del Commercio Estero (SACE), the Italian ECA, and the US International Development Finance Corporation with Atradius DSB³¹ from the Netherlands, UK Export Finance (UKEF), and Bpifrance filling in the rest. Lastly, \$1.2 billion worth of loans was backed by the Export Credit Insurance Corporation of South Africa (ECIC).

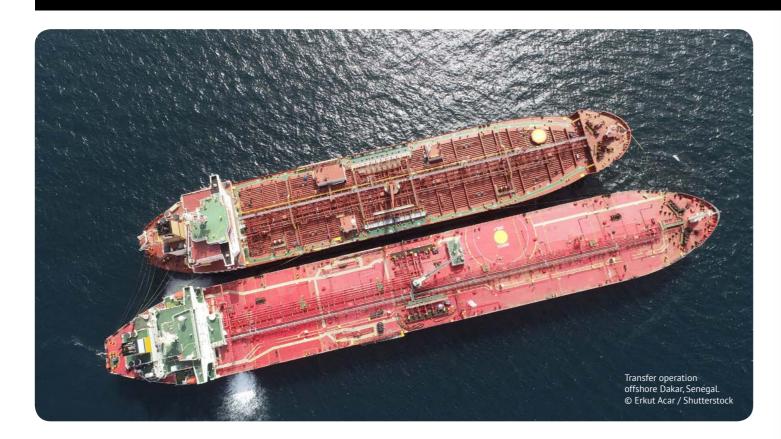
FIGURE 7: ECA COVERED PROJECT FINANCE, BETWEEN 2016 - JUNE 2021 FOR 58 SELECTED AFRICAN FOSSIL FUEL PROJECTS



FINANCIAL ADVISORS

Besides providing loans or guarantees for loans, financial institutions can also be involved as financial advisors in project finance transactions. For the projects in scope, the role was mostly taken up by commercial banks. The banks most often

involved as financial advisors were **Standard Chartered**, **SMBC** and **Société Générale**. Standard Chartered has taken up this role six times. SMBC and Société Générale have each advised or are advising on five projects.



FINANCE TO FOSSIL FUEL COMPANIES

The majority of finance for the fossil fuel industry, in Africa and elsewhere, does not consist of project-specific loans, but comes in the form of general-purpose corporate loans and the underwriting of bond issuances for fossil fuel companies. Our research shows that financial institutions have financed 24 of the biggest fossil fuel companies that operate in the region, to the tune of **\$82.5 billion** (compared to the total of \$49.8 billion for project focused finance identified in the last section).³² These financial institutions include a large number of commercial banks as well as eight national development banks and three multilateral finance institutions.³³

The ten fossil fuel companies that received most of the corporate finance attributable to their African operations during this period are, in order of finance received, UK-based Tullow Oil, Eskom from South Africa, TotalEnergies from France, US-based Exxon Mobil, UK-based BP, China National Petroleum Corporation (CNPC), the Angolan state company Sonangol, the Italian Eni, UK/Netherlands-based Shell, and US-based Chevron.

As can be seen in the graph below, the largest financiers are **JPMorgan Chase, Barclays** and **Citi**, "usual suspects" who are also ranked as the largest fossil fuel financiers globally in the *Banking on Climate Chaos* report. In addition, just as with project finance, **Standard Chartered** and **Société Générale** also take up a larger share of the sum. The top 15 is dominated

by commercial banks from Europe and the United States. The only institutions in the top 15 not from Europe or the US are the **China Development Bank**, the **African Export-Import Bank** and **SMBC**. A further breakdown for Asian and African based financial institutions can be found below in Figure 11 and 12.

FIGURE 8: TOP 10 MOST CORPORATE FINANCE RECEIVED FOR AFRICAN OPERATIONS, BETWEEN 2016 - JUNE 2021

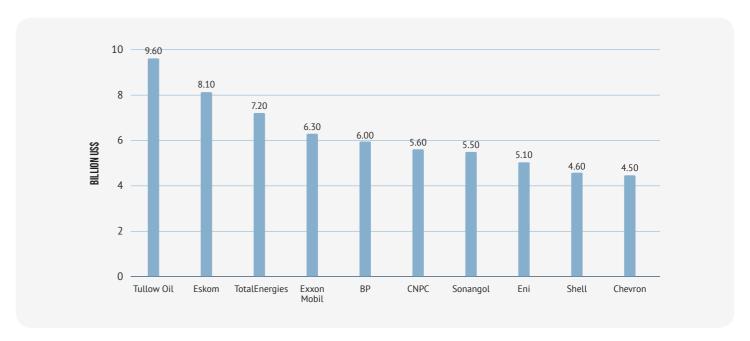
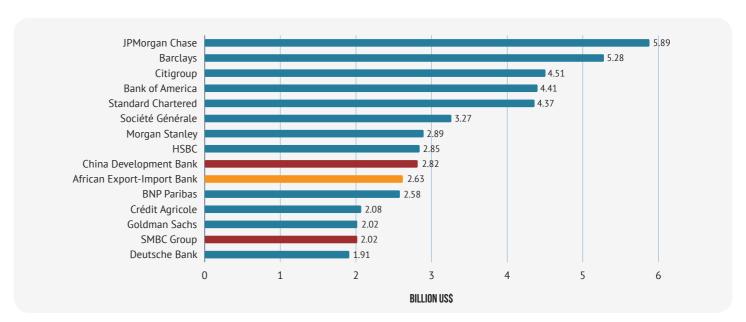


FIGURE 9: TOP 15 FINANCIAL INSTITUTIONS, GENERAL CORPORATE FINANCE BETWEEN 2016 - JUNE 2021

FOR THE 24 COMPANIES SELECTED FOR THIS REPORT



TO SEE THE ENTIRE LIST OF FINANCE INSTITUTIONS THAT GENERAL CORPORATE FINANCE BETWEEN 2016 AND THE END OF JUNE 2021, SEE APPENDIX 4.

The dominance of European and US banks not only shows in the top 15 but also in the overall sums of company finance provided by financial institutions, as shown by the pie chart below. Commercial banks from North America, Europe and Australia provided \$56.8 billion of the total finance sum, most of it coming from the United States (\$21.5 billion); the United Kingdom (\$13.5 billion); and France (\$9.5 billion). Asian institutions provided \$16.5 billion, and only \$8.9 billion of the finance is coming from Africa itself.

The finance from Asia, as with project finance, mainly came from China and Japan, with financial institutions from China bringing in \$10.9 billion and Japanese banks bringing in an additional \$5 billion. Public finance institution **China Development Bank**, which came up as the number one Asian institution in providing public project finance, again ranks first in providing company finance. Other recurring financiers are the commercial Japanese banks **SMBC**, **Mizuho**, **MUFG**, and **ICBC** from China.

FIGURE 10: FOSSIL FUEL GENERAL CORPORATE FINANCE PER REGION, BETWEEN 2016 - JUNE 2021

FOR THE 24 COMPANIES SELECTED FOR THIS REPORT

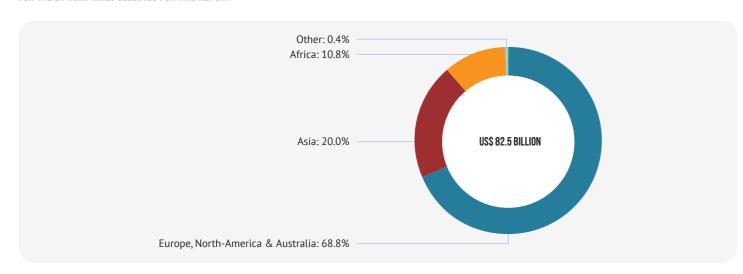
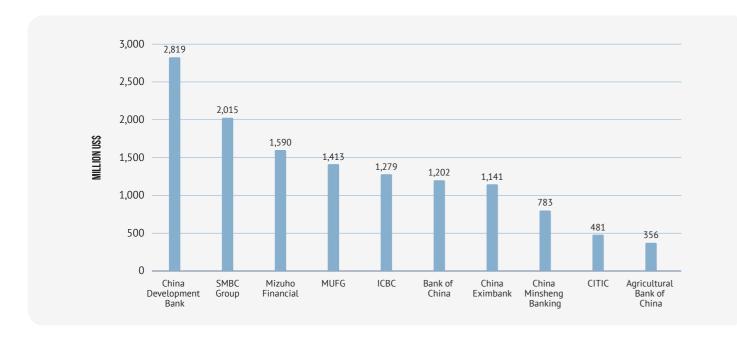


FIGURE 11: TOP 10 GENERAL CORPORATE FINANCE BY ASIAN FINANCIAL INSTITUTIONS BETWEEN 2016 - JUNE 2021

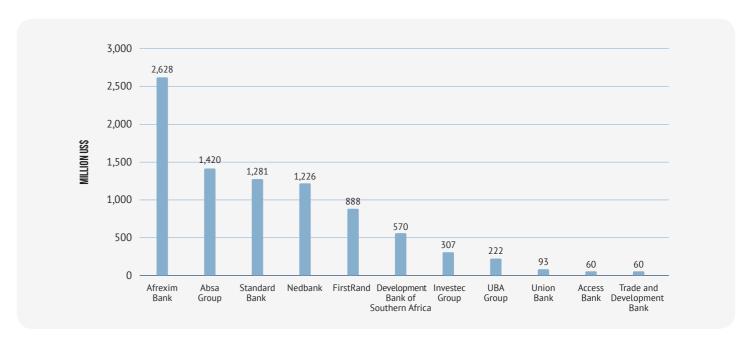
FOR THE 24 COMPANIES SELECTED FOR THIS REPORT



The \$8.9 billion in company finance coming from Africa itself is mostly made up of South African finance, which was \$5.7 billion in the report period. While the regional public financial institution the **African Export-Import Bank** takes first place, most of the finance comes from South African commercial banks **Absa Group, Standard Bank** and **FirstRand**.

FIGURE 12: TOP 10 GENERAL CORPORATE FINANCE BY AFRICAN FINANCIAL INSTITUTIONS BETWEEN 2016 - JUNE 2021

FOR THE 24 COMPANIES SELECTED FOR THIS REPORT







OVERALL FINANCE

In the five and a half years since the Paris Climate Agreement was adopted, public and private sector financial institutions have poured at least **\$132.3 billion** into fossil fuel companies and projects in the African regions covered by this report.

Corporate finance makes up the larger part of this sum, namely \$82.5 billion, while the remaining \$49.8 billion went into direct finance for fossil fuel projects. While public and private financial institutions provided roughly similar amounts of project finance, public financial institutions provided only \$8 billion of the \$82.5 billion of corporate finance, with the rest taken up by private financial institutions.

Of the top 15 financial institutions, 10 are commercial banks and five are public finance institutions. One of these three is the **China Development Bank**, which has been the single largest financier of fossil fuel projects and companies in Africa in this period. However, the majority of the largest fossil fuel financiers are from North America and Europe, in particular from the United States, the United Kingdom and France. **JPMorgan Chase, Standard Chartered, and Barclays** together with the **China Development Bank** and **China Export-Import Bank** make up the rest of the top 5 (see figure below). The only African financial institution in the list is the **African Export-Import Bank**.

In all, the vast majority of finance for fossil fuels in Africa flows from the Global North. Financial institutions from North America, Europe and Australia provided \$72.5 billion of the finance between 2016 and mid-2021. Finance from Asian financial institutions, mostly from China and Japan, makes up \$41.8 billion of the total amount. In contrast, African financial

institutions only provided \$15.4 billion. While the continued support for fossil fuel developments in African countries is unwelcome, no matter where it comes from, it is clear that institutions particularly from North America and Europe and to a lesser extent from Asia play the biggest role in financing the impacts described in the following chapters.

FIGURE 13: OVERALL TOP 15 FINANCIAL INSTITUTIONS. FOSSIL FUEL PROJECT & GENERAL CORPORATE FINANCE.

BETWEEN 2016 - JUNE 2021 FOR 58 PROJECTS AND 24 COMPANIES SELECTED FOR THIS REPORT

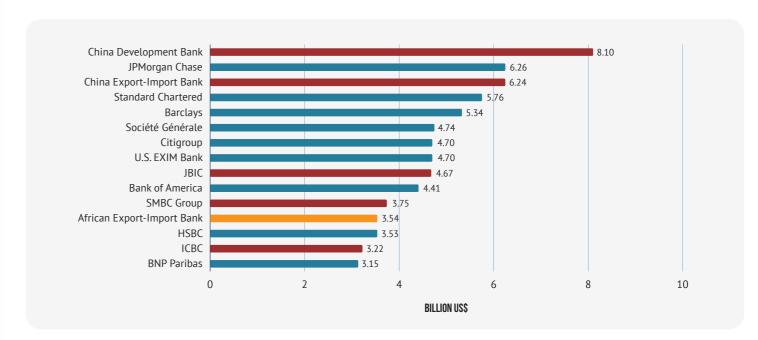
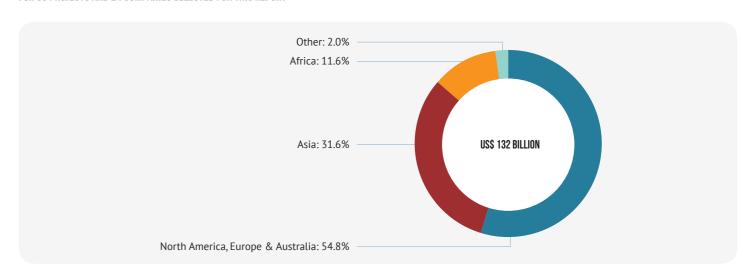


FIGURE 14: OVERALL PROJECT & CORPORATE FINANCE BY REGION BETWEEN 2016 - JUNE 2021

FOR 58 PROJECTS AND 24 COMPANIES SELECTED FOR THIS REPORT





4. IMPACTS & RISKS OF FOSSIL FUEL PROJECTS IN AFRICA

This chapter focuses on the impacts and risks of the continued finance for fossil fuel projects and companies in African countries. It addresses the development promise versus the grim economic and political realities that come in the wake of fossil fuel development. The chapter also provides an overview of the many socio-economic, environmental and climate impacts fossil fuel projects have at the local level, which are further detailed in the ten highlighted projects which follow in Chapters 6 and 7.

FOSSIL FUEL DEVELOPMENT IN AFRICA: DECADES OF POVERTY AND CORRUPTION

While many industrialised nations advocate for a switch away from fossil fuels to renewables at home, as this report shows, leading financial institutions from these countries continue to push fossil fuel developments in African countries. These fossil fuel developments will generate enormous emissions with huge climate impacts. A recent report by Oil Change International (OCI) found that if the fossil fuel industry proceeds with its plans for Africa in the next thirty years, this will lead to an additional 62 billion tonnes of CO_2 being emitted. This is equivalent to 13% of the remaining carbon budget for a 50% chance of staying within a 1.5°C threshold of the Paris Climate Agreement. Despite

this massive risk to the world's climate, the fossil fuel industry and its public and private sector financiers continue to market ongoing and new extraction plans as an important source of development, claiming that it will create public revenues, jobs and energy access for the world's poorest nations.³⁴

This fossil fuel development promise, marketed by multinationals and political elites, has been around for decades. Yet reality shows a different picture when it comes to African countries, where the fossil fuel industry has been unable to deliver on its promises of bringing development and increased energy access. Despite the fossil fuel resources extracted from their lands, millions of Africans continue to live in energy poverty.³⁵ Local jobs promised in the wake of the fossil fuel developments often fail to materialise, as the section on socio-economic impacts below explains. Instead of bringing development, inequalities have deepened and community grievances grown as the ten highlighted projects featured in chapter 6 and 7 illustrate. This phenomenon has been described as the "resource curse".

The fossil fuel resource curse also comes with major political implications, as deals struck between multinationals and political elites often fuel corruption, which undermines nations' democratic functioning and strips citizens of their voices and their human rights. A 2019 report by the Natural Resource Governance Institute assessing natural resource governance in 28 African countries that produce oil, gas and minerals

concluded that the more dependent a country is on its natural resources, the less transparently and accountably the extractive sector is managed.³⁶ This is linked to the fossil fuel industry often operating on tax evasion and forms of illicit financial flows, which undermine public accountability mechanisms and facilitate corruption.³⁷

"In the Democratic Republic of Congo, oil and gas multinationals have never facilitated transparency. Lies and corruption have always characterised their role in this sector. Local environmental defenders, who opposed the fossil projects, have become targets. Many were arrested, others had to flee the region. All of this was done with the objective of scaring people and concealing the corruption that accompanied the projects."

- PARTNERS FROM THE DRC38

It is estimated that the corruption and illicit financial flows connected to fossil fuel development have amounted to Africa losing out on approximately \$50 billion annually between the 1980s and 2018. The losses due to capital flight exceed African countries' debts and the cumulative foreign aid received combined.³⁹

POOR CONTRACT TERMS AND GROWING FINANCIAL RISKS

With most of the coal, oil and gas being exported, as mentioned in the Introduction, ordinary Africans have seen little of the benefits. Poor contract terms, debt traps, and foreign multinationals having complete ownership over production has mainly served the interests of companies and nations outside of Africa. The majority overseas ownership means that profits flow out of Africa while financial risks will be felt disproportionately by African governments, and consequently local communities end up bearing the brunt.⁴⁰

Poor contract terms have also led to many African governments bearing the risks. As fossil fuel investments are becoming riskier due to price fluctuations and climate policies, many fossil fuel companies are demanding a softening of fiscal terms. Many African countries have agreed to these terms in order to ensure that investors stay on board. For example, contracts may stipulate that developers can first recuperate their costs, before any taxes need paying. This means that taxes only start coming in several years after fossil fuel production has commenced. As a result, many African governments are incurring costs and debts linked to the fossil fuel development, without sufficient tax income flowing back, meaning public interests end up being sacrificed.⁴¹

"The foreign financial actors and companies in Uganda and Africa in general have provided support – both financial assistance in form of grants and loans, and technical services building local capacities to work in the sectors. This is partly responsible for the ever-increasing foreign debt reaching a new high of \$18 billion as of December 2020, representing nearly 49.9 per cent of the country's GDP."

- ENVIRONMENT GOVERNANCE INSTITUTE, UGANDA

Research by OCI found that approximately one third of fossil fuel production is going to take place in so-called "newcomer" countries - for example Mozambique, Uganda, South Africa and Senegal – with little or no existing oil and gas extraction. Most of this production will be in the hands of multinational corporations. These newcomer countries - including some of the poorest in Africa – currently lack fossil fuel infrastructure and regulatory extraction systems, meaning that these projects will come with added costs. 42 A poor country like Mozambique for example, which already suffers from an enormous debt burden, has welcomed gas developments as these are supposed to help pay off its debts in the decades to come. 43 However, as the world's major economies are moving towards phasing out fossil fuel public finance and towards the uptake of renewable energy, the economic prospects of oil, gas and coal in Africa will be severely affected, and fossil fuel investments risk becoming stranded assets in the near future.44

In the next ten years, the industry is risking \$230 billion when it comes to new oil and gas projects becoming stranded assets. This will amount to \$1.4 trillion by 2050.⁴⁵

The first warning signs are clear: instead of growing 32% by 2050 as expected prior to 2020, in 2020 oil and gas production in Africa was estimated to decline by 24%. Climate policy implementation, changing regulations, and the increasing competitiveness of renewable energy sources means these financial risks will only increase. This is particularly the case in the African context, where 68% of the projected oil and gas production from not-yet-committed projects in 2020-2050 involve relatively costly fracking or extraction from deepwater or extra heavy oil sources. 46

FOSSIL LOCK-IN

"Foreign finance has created single commodity economies across Africa, and some of the investments in fossil fuels have equipped some of the most repressive and brutal regimes. Dependency on fossil fuels has trampled on the innovation and diversification of economies. It undermines the growth and development of other sectors and often creates financial deficits when investments run dry. In Zimbabwe for example, the continued focus on coal energy undermines the Just Transition."

- CENTRE FOR ALTERNATIVE DEVELOPMENT, ZIMBABWE

The COVID-19 crisis and the recent drop in oil prices gave a clear picture of what can happen to African countries whose economies are heavily dependent on fossil fuels. Nigeria, a major oil producing country, was hit hard economically by this drop in oil prices.⁴⁷ This presents a strong prediction of what can happen to African economies which are – and are currently being made – dependent on fossil fuels via ongoing public and private sector fossil fuel finance flows.

With public and private sector fossil fuel support still outweighing the support going to renewable energy, African countries risk becoming locked out of a timely low-carbon transition. The fossil fuel dependency created by this finance undermines the ability of African economies to leapfrog fossil fuels and make use of their enormous renewable energy potential, as Chapter 8 explains. This will, in turn, have an impact on African countries' resilience to face the many challenges posed by climate change, as well as global decarbonisation efforts. Stranded fossil fuel assets, reduced revenues, crashing oil prices and growing national debt and government deficits will likely generate a dangerous ripple effect leading to massive unemployment and rising poverty, locking countries into a vicious cycle of poverty for decades to come.⁴⁸

OCI estimates that 36% of Africa's fossil fuel emissions are not yet locked in, as they would come from new fossil fuel projects (2020-2050) that are not yet in production or developed. This implies that there is room to cancel them with little legal or political cost and choose a more sustainable renewable energy future instead.⁴⁹

SOCIO-ECONOMIC IMPACTS OF FOSSIL FUEL DEVELOPMENT

The highlighted projects featured in the next chapters show that fossil fuel development has severe socio-economic consequences at the local level, affecting the livelihoods and wellbeing of African communities.

Frontline communities' rights in Africa are systematically violated, with the environment they depend on ending up as zones of sacrifice. The fossil fuel projects often lead to the displacement of thousands of people, the loss of access to farming or fishing grounds and related trade, and consequently the loss of food security. Land and income compensation processes are often lacking, delayed or inadequate. As a result, displaced people end up with less than promised and less than their entitlement. Where compensation is provided, it often does not allow displaced people to acquire new land or materials to gather a liveable replacement income. This is also linked to the fact that the costs of land and living (e.g. housing and food) tend to go up in extraction areas due to an influx of migrant workers, raising the price of land and costs of living.

The newcomers also tend to increase competition for local jobs – e.g. by setting up their own businesses – which can further increase tensions with the local communities.

The fossil fuel jobs that are promised to make up for the loss of livelihoods for the locals, in reality seldom materialise or are short term (e.g. construction jobs). Retraining programs rarely result in permanent or higher quality and well paid (fossil fuel) jobs for locals.⁵⁰ Women, in particular, face the risk of unemployment and poverty after resettlement, as they tend to depend on traditional livelihoods such as foraging or fishmongering. The jobs promised in the wake of the fossil fuel developments are often short-term construction jobs, which generally do not benefit women.

Research has found that Africa's extractive sectors are estimated to employ less than 1% of the continent's workforce. Fossil fuel jobs have a low multiplier effect, especially when extraction takes place in remote areas, including offshore – which is on the rise in Africa.⁵¹

Community members are often not, or not in a timely manner, provided with information about the fossil fuel project. Consultation processes are not taking place or are not done properly, undermining people's right to information, consultation and right to say no. On top of this, women are often not included in the consultation processes taking place prior to the fossil fuel developments. If done at all, these are predominantly held with the chiefs and elders in the local communities, meaning that women's concerns about loss of land and income, as well as required compensation processes are not taken on board. In a context in which women's rights to land are often weak – due to customary traditions that prevent them from owning the lands they cultivate - women end up not being compensated for the loss of land.⁵²

Condemned to poverty or made dependent on outside help for survival as they have lost their traditional sources of income, many locals are left struggling to make ends meet for their families. As families lack the means to pay for tuition fees, children are often pulled out of school. In such a context, women and girls often face an increased risk of becoming exposed to sexual and gender-based violence. This ranges from sexual harassment in project sites by security forces, to sexual violence in relocation areas as well as demanding sexual favours from women in exchange for access to jobs. Rising poverty also means that women become more vulnerable to teenage pregnancy, because of leaving school early, and sexual exploitation, including (forced) prostitution, which is sometimes linked to the influx of (foreign) workers. Social and cultural ties established over long years of cohabitation between families living in the same locality are often also destroyed upon being forced to leave their lands.⁵³

In terms of health impacts, pollution caused by oil spills and gas flaring has severe consequences for local communities, with medical implications ranging from respiratory problems, leukemia due to benzene exposure, as well as miscarriages and higher child death rates.⁵⁴

Many local communities that oppose and mobilise against the fossil fuel developments on their territories find themselves repressed by their own government. As social tensions rise, environmental and human rights defenders (EHRDs), journalists as well as frontline communities increasingly face threats, restrictions, arbitrary arrests, physical attacks and lack of access to fair legal procedures. In some instances, people who oppose fossil fuel developments have been kidnapped, disappeared, or have been murdered.⁵⁵

Extraction has fueled numerous conflicts on the African continent, which is often met with a militarised response. A recent example of this, also featured in the next chapter, is Mozambique, where the gas projects have generated an influx of the Mozambican army, insurgents, private security troops and foreign troops (Rwandan, US troops and an EU mission) on the ground. The conflict in Cabo Delgado has resulted in hundreds of thousands of refugees, thousands of people losing their lives, and gross human rights violations, including severe gender-based violence. 57

ENVIRONMENTAL IMPACTS

Fossil fuel production in African countries severely affects local ecosystems. Oil pollution incidents have contaminated sensitive ecosystems including water resources, mangroves and swamps, as well as the agricultural lands people depend on for their survival. As a result, safe drinking water, fish and crop levels have been affected, impacting local communities as well as the many species dependent on them. Gas flaring has contributed to acid rainfall and toxic release in the atmosphere. Proper remediation of polluted sites is often absent, meaning local communities and local habitats cannot recover.⁵⁸

Due to fossil fuel developments, forested lands and natural reserve areas are cleared to make way for infrastructure. This leads to ecological deterioration and biodiversity loss, and puts plant and animal species at risk of extinction. For example, in Uganda, the oil developments are concentrated in a biodiversity hotspot, the Albertine Graben region. This region is characterised by natural water resources and has abundant wildlife. The national reserves and forest lands are sensitive ecosystems listed on the IUCN Red List of Ecosystems, and are the home of protected species which risk being affected by the project, as can be read in the case study.

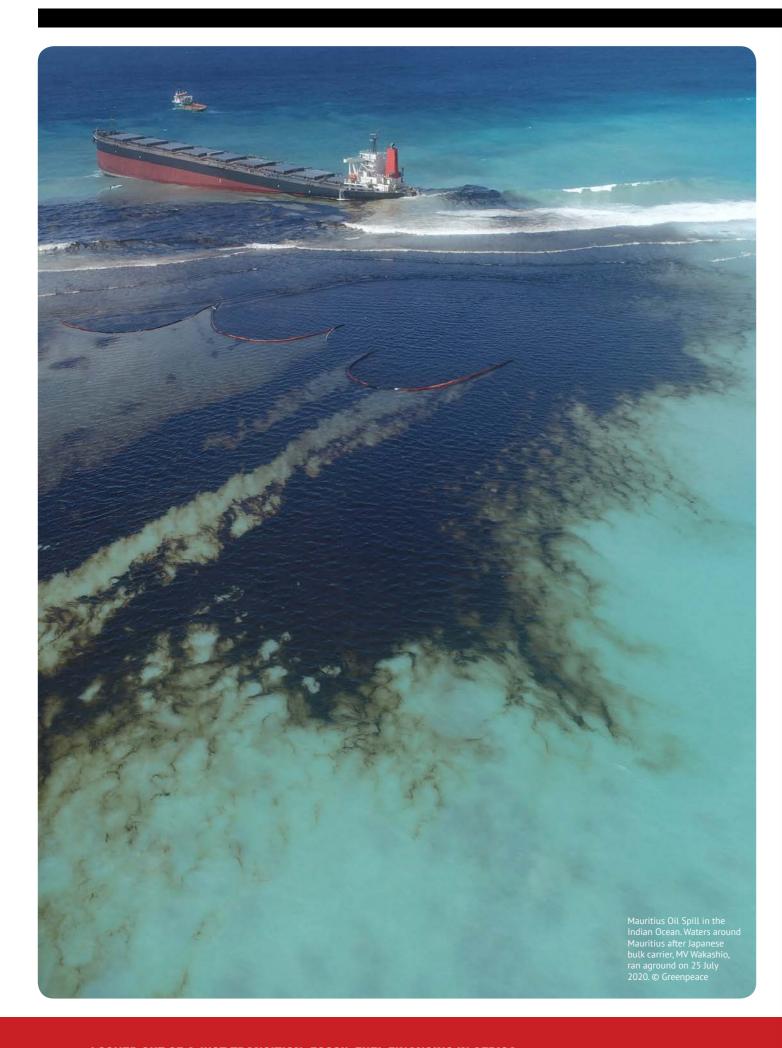
Noise pollution – both on land and at sea – which stems from the traffic and drilling in the wake of the fossil fuel projects is a stressor for wildlife and marine life, affecting species' migration, breeding and communication. Other forms of marine pollution – such as seaweeds being cut during drilling, or oil leakages during drilling – also lead to species moving away or dying, which in turn affects the livelihoods of fishing communities.⁶¹

CLIMATE IMPACTS

The fossil fuel industry developments in Africa contribute to climate change both by adding to global emissions of greenhouse gases, and via the destruction of natural forests and other habitats, which impacts their important role as carbon absorption sinks. As global climate change accelerates, African communities will be facing many of the accompanying environmental and health impacts. Mozambique, for example, is already feeling the impacts, being hit by several cyclones in recent years, while Uganda is suffering from an increased frequency in extreme weather events like floods and drought.⁶²

The African continent is expected to warm up faster than any other continent (approximately double the global average rate), which will generate heat waves, longer droughts, as well as cyclones, floods and landslides. Changing climate patterns will also create biodiversity loss, habitat shrinkage, an increase in pest populations and a decline in carbon absorption capacities of Africa's ecosystems. They will cause crop failures and water shortages, while rising sea levels and floods will pose a risk for people's homes. Malnutrition, heat stress and other diseases following in the wake of natural disasters are expected to lead to an additional 145,000 deaths per year.⁶³





5. RISKS FOR FINANCIAL INSTITUTIONS

The fossil fuel industry does not only present immediate risks to African communities, their natural environment, as well as longer term risks such as economic vulnerability and climate disasters. Financing the fossil fuel industry is also increasingly becoming a risky business for financial institutions themselves. Some of the risks for financial institutions are discussed in this chapter.

FINANCIAL PERFORMANCE & FINANCIAL INSTABILITY

A scenario that seems increasingly difficult to avoid is that of a wave of stranded assets. Fossil fuel assets, including oil reserves, equipment, and whole projects such as pipelines, are expected to lose their value as a result of factors including the ongoing energy transition processes and the consequent changing regulatory and policy frameworks; the increasing competitiveness of renewable energy; and the rising costs of fossil fuel extraction and production.⁶⁴

Fossil fuel companies are already facing stranded assets today. Systemic weaknesses, including unsustainable levels of corporate debt, are present in the industry, and intensified

during the COVID-19 pandemic and the oil price crash in 2020. A combination of these factors led to \$145 billion in asset write-downs from oil and gas companies.⁶⁵ In the near future, all new oil, gas and coal projects are at risk of becoming stranded and according to the International Energy Agency this even applies to some projects already in operation.⁶⁶ The situation is further aggravated by the fact that a large part of the excess investment in the industry is being justified by relying on unproven, uncertain and risky carbon capture and removal technologies.⁶⁷ Research shows that as much as half of the world's fossil fuel assets will be worthless by 2036 if the world follows a net zero scenario.⁶⁸ In a scenario of fossil fuel assets falling to zero, banks might not be able to cover their losses.⁶⁹ The situation for the fossil fuel industry in Africa is no different.

Fossil fuel companies have already experienced sharp declines and delays in production in countries including Angola, Nigeria, Tanzania, and Mozambique. Corruption, political instability, and large debts further increase the risks of stranded assets.⁷⁰ In addition, plans for employing more costly, often unconventional methods of production in 71% of the projected oil and gas production in Africa means cost overruns are more likely.⁷¹

Stranded assets in the fossil fuel industry and financial institutions' exposure to these assets not only present a risk to the institutions. It is increasingly acknowledged that new fossil fuel exploration and production represents a significant risk to the stability of the financial system as a whole.⁷² Excess investment in and financing of fossil fuel extraction will lead to a failure in limiting global warming and the resulting global economic losses of such a scenario will present a systemic threat to the global financial system.⁷³

All in all, it is becoming increasingly clear that financing the energy transition is a much safer bet. A growing body of evidence demonstrates a strong correlation between companies with strong sustainability strategies and Environmental, Social, and Governance (ESG) credentials and an improved financial performance.⁷⁴ At the same time it is important to remember that, while financial institutions have an important role to play in financing the energy transition, it is important this is done in a fair manner, without replicating the extractive energy model now in place, which has not delivered energy access nor brought the promised development for many Africans.⁷⁵

CLIMATE CHANGE LITIGATION

Climate change litigation cases have been on the rise in the past ten years. While most climate cases have been filed by North American or European claimants, there have been a number of examples of climate litigation filed by African claimants and an increase in climate litigation on the African continent can be expected in the coming decades.⁷⁶ Most of the cases so far have been filed against governments and public institutions, but private companies are also increasingly a target.⁷⁷

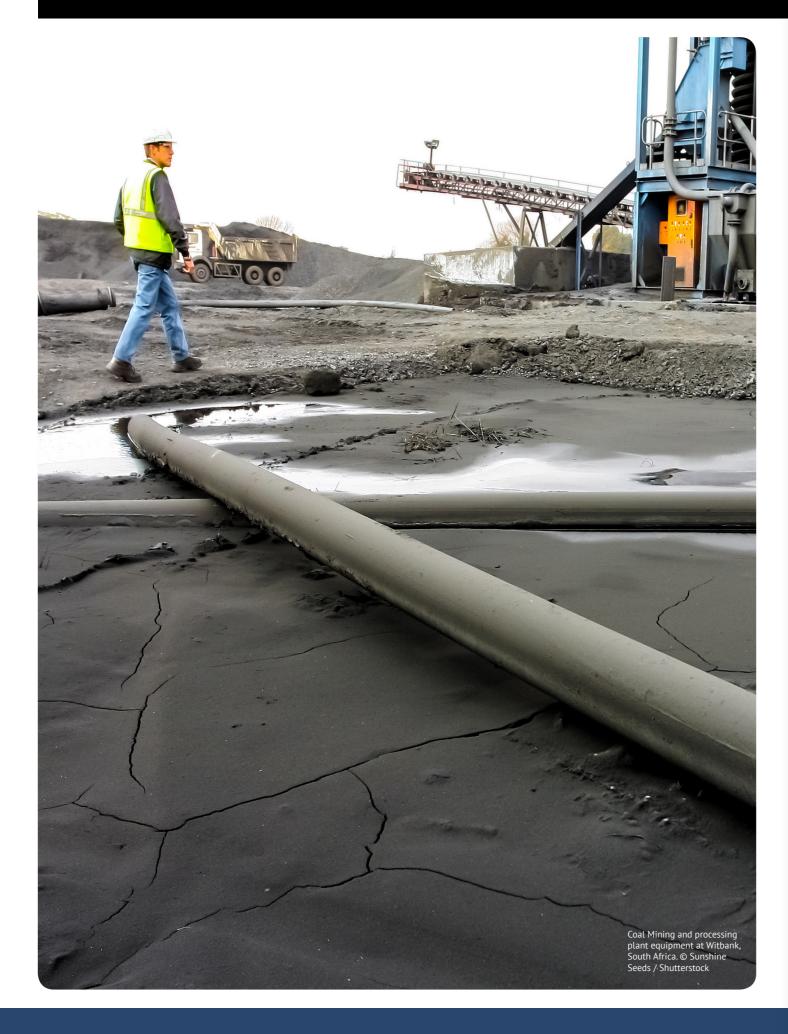
Examples of some of these cases are the claim brought to court by 40,000 citizens in the Niger Delta against Shell, and the Amis de la Terre case against TotalEnergies' oil operations in Uganda and Tanzania.⁷⁸ Financial institutions also run the risk of being held responsible for their financing of fossil fuels and

past environmental conduct in court.⁷⁹ Campaigners already announced that they are considering broadening their focus on climate litigation targets to include financiers.⁸⁰ One very recent example is the court case started by Friends of the Earth England, Wales and Northern Ireland against UK Export Finance (UKEF) for financing the Mozambique LNG project.⁸¹ Targeting banks in climate litigation could dramatically broaden the scope of climate-related risks.⁸² Banks are increasingly starting to recognize the real possibility of being targeted in a lawsuit and the consequences of such a scenario.⁸³ Consequences include an increase in costs for the bank associated with lawsuits, regulatory fines, increased insurance premiums, and a reduced demand for the bank's products due to reputational damage.⁸⁴

REPUTATIONAL RISK

As mentioned above, an important risk associated with climate litigation and fossil financing in general is that of damage to the reputation of a financial institution, especially commercial banks.85 Consumers and other stakeholders increasingly pay attention to the banking sector's response to climate change. Exposure to the fossil fuel industry as a whole or to specific fossil fuel companies, and therefore to financing high carbon emissions, threatens to damage the image of banks. Being targeted in climate change litigation also poses a real risk of reputational damage,⁸⁶ quite apart from the costs of an adverse decision. Financial institutions may face reputational costs even when they are not directly targeted but the public nevertheless associates the defendant's activities with the financial institution.⁸⁷ This risk of reputational damage is also recognized by banks, as, among others, a survey covering 90% of the UK banking sector conducted by the Bank of England demonstrated.88 The fossil fuel industry in Africa, which is characterised by intransparency, unaccountable management, corruption and illicit financial flows, and severe environmental and human rights violations, is a hotbed for reputational damage.89





6. HIGHLIGHTED PROJECTS: IMPACTS OF FOSSIL FUEL PROJECTS ALREADY FINANCED

"DUE TO AIR POLLUTION THROUGH SULPHUR DIOXIDE,
PARTICULATE MATTER, AND OTHER PARTICLES, THE MEDUPI
POWER PLANT IS ESTIMATED TO CAUSE 364 DEATHS PER YEAR,
AS WELL AS 453 CASES OF CHRONIC BRONCHITIS AMONG ADULTS
AND 1,552 AMONG CHILDREN, AND IS THEREFORE CONSIDERED
ESKOM'S MOST LETHAL POWER STATION." – MEDUPI COAL POWER PLANT, CASE STUDY



MEDUPI COAL POWER PLANT | SOUTH AFRICA



The Medupi Power Station is a coal-fired power plant located near Lephalale, in the South African province of Limpopo. Commissioned after extended power shortages in 2007, the power plant was not completed until mid 2021, after years of delays. Eskom, South Africa's public utility and the world's most polluting power company, built and operates the power station. The plant has a total capacity of 4,764 megawatts (MW) and, according to Eskom, is the fourth largest coal-fired plant in the world. The plant is supplied by Exxaro's Grootegeluk coal mine and consists of six 794 MW units that each became operational between August 2015 and July 2021. In addition to time and cost overruns, the power station is plagued by numerous defects, including an explosion at Unit 4 in early August 2021.

FINANCING

Multiple public and commercial financial institutions have provided loans to Eskom for the construction of its Medupi project. Public finance toward this highly controversial project include a \$3.05 billion loan from the World Bank in 2010 and \$2.6 billion from the African Development Bank in 2009.⁹³ European commercial banks BHF, BNP Paribas, Commerzbank, Crédit Agricole, Crédit Mutuel, UniCredit, KfW, Natixis and Société Générale also provided over €2 billion in the early stages of construction.⁹⁴ Between 2016 and 2017, the China Development Bank lent \$2 billion to Eskom for the completion of the Medupi power plant.⁹⁵ In 2019, the New Development Bank granted Eskom a \$476 million loan to partly finance a sulphur dioxide emission reduction plan for the Medupi plant.⁹⁶ Repairs and maintenance will exacerbate Eskom's financial difficulties - a textbook case of utility death spiral.

IMPACTS

SOCIO-ECONOMIC IMPACTS

Due to air pollution through sulphur dioxide, particulate matter, and other particles, the Medupi power plant is estimated to cause 364 deaths per year, as well as 453 cases of chronic bronchitis among adults and 1,552 among children, and is therefore considered Eskom's most lethal power station.⁹⁷ This is partly due to a lack of critical flue gas desulphurisation (FGD) technology, known as scrubbers. Although air scrubbers were a condition for its 2010 loan, the World Bank agreed to push the FGD implementation deadline to 2027.98 In December 2021, the Department of Forestry, Fisheries and the Environment denied Eskom's application for exemption from minimum emission standards.⁹⁹ However, the company appealed the decision and warned that immediate compliance would induce price hikes and drastic load shedding. 100 The health and economic burden caused by exemptions to the minimum emission standards are expected to greatly exceed the costs of the equipment required to comply with the standards. 101

ENERGY ACCESS AND PRICES

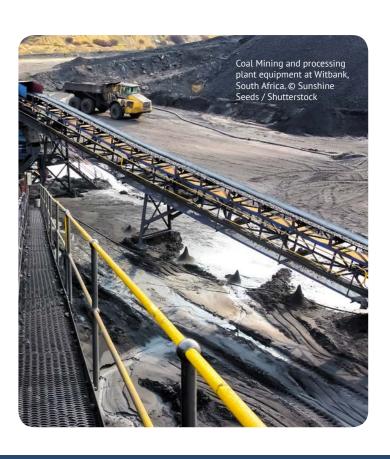
Despite the additional energy generation capacity provided by the Medupi coal-fired power plant, Eskom is failing to address power shortages. This is partly due to the fact that a significant portion of the energy produced by the plant is consumed by the extractive sector. While companies in that sector benefit from special purchase agreements, Eskom has been imposing increasingly higher electricity prices on South African citizens. A 2018 report from the Energy Research Centre at the University of Cape Town states that the cost overruns of the Medupi and other power plants have contributed to the rapidly increasing electricity prices.

ENVIRONMENTAL IMPACTS

The coal power plant also poses a serious threat to the climate and the environment. The power plant increases pressure on water resources in an arid region. The Mokolo and Crocodile River Water Augmentation Project (MCWAP) and its proposed 130 km pipeline expansion, meant to secure Medupi's water supply, is criticised for its adverse impacts on local agricultural activities. ¹⁰⁶

CLIMATE IMPACTS

At full capacity, the Medupi power station will release around 30 million tonnes of carbon dioxide into the atmosphere every year, worsening the climate crisis.¹⁰⁷ With an annual coal consumption of about 15 million tonnes and an operational life expectancy of 50 years, the power station will likely drive the expansion of coal mining in South Africa.¹⁰⁸





OFFSHORE CAPE THREE POINTS | GHANA

ABOUT THIS PROJECT

Offshore Cape Three Points (OCTP) is an integrated oil and gas project in the Tano Basin, approximately 37 miles (60 kilometres) off the coast of Ghana. The development of the project started in 2015 and involves the combined development of three gas fields - Sankofa Main, Sankofa East and Gye Nyame - and two oil fields - Sankofa East Cenomanian and Sankofa East Campanian. The project is run by Eni (majority stake of 44.4%), Vitol (35.6%), and Ghana National Petroleum Corporation (20%). 109 Oil production started in 2017 and gas production in 2018. Extraction of the oil and gas takes place at depths ranging from 1,600 to 3,600 feet (500 to 1,100 metres), and include a 39 mile (63 kilometre) gas pipeline to the coast, 19 undersea wells, and a floating gas processing, storage and off-loading (FPSO) unit. The fields' reserves are significant, estimated at 500 million barrels of oil and 40 billion cubic feet (1.1 billion cubic metres) of gas.¹¹⁰ The reserves are expected to meet the demands of Ghana's thermal power plants for the next 20 years.

In 2019, a discovery was made in Cape Three Points Block 4, which laid the foundation for an expansion of the project. The new exploratory well has been named Akoma-1X, which is expected to have a considerable gas reserve and other condensate resources. CTP-4 is owned by a joint venture formed by ENI Ghana (42.5%), Vitol Upstream Ghana (34%), National Petroleum Corporation Ghana (10%), Woodfields Upstream (9.5%) and Explorco (4%). The exploratory well has been drilled 12 km northwest of the production vessel for the existing Sankofa and Gye Nyame fields. The oil produced from the OCTP project is mainly for export, as crude oil for local consumption is mainly imported. 98% of Ghana's thermal power is generated by gas, of which more than 50% comes from the OCTP project. 112

FINANCING

The project has a total cost of \$7.3 billion and financial close for the project was achieved in March 2017. Funds were secured from UK Export Finance (UKEF), International Finance Corporation (IFC), IFC's co-lending portfolio and commercial bank loans. The commercial debt financing was provided by Standard Chartered, HSBC, ING, Société Générale, Mizuho, MUFG, Natixis and Bank of China.¹¹³

IMPACTS

SOCIO-ECONOMIC IMPACTS

The Offshore Cape Three Points project has led to the acquisition of large tracts of land, causing socio-economic and cultural impacts in the coastal regions of the Jomoro and Elembele Districts, which are the immediate host communities of the oil and gas deposits. These regions are facing restrictions on sea fishing as well as farmlands being taken over by fossil fuel-related project developments. As a result of this, social tensions have increased on issues such as who is responsible for providing alternative livelihoods, the need for adequate compensation, and the protection of ancestral rights on sea and land. Several communities have refused to accept the compensation packages that have been offered.¹¹⁴

Fisher folks are also confronted with loss of income due to a decline in fish catch, which they attribute to the artificial lighting system used by the oil vessels that attracts fish to the oil and gas fields. It is a major problem for fishers who traditionally fish at night, and whose fishing grounds have been restricted by the 500-metre 'no fishing zone' around the OCTP fields. Some fishermen who crossed into the zone have had their boats seized by the marine police. Also, as a direct consequence of drilling in the region, seaweed is cut loose and overtakes the fishing nets. The decline in fish catch is leading to income losses, forcing many into a situation of growing debts. As fishing trips are expensive, fishers have to obtain credit loans from banks and microfinance institutions, or borrow from friends and relatives, in order to stay operational. Due to their growing inability to repay the loans, many banks no longer lend to fishermen and many face difficulties catering for their families. Fishmongers, usually women, are equally impacted.

They either have a shortage of fish to process, or are forced to buy fish at higher prices, which means selling their processed fish at a higher price to make ends meet.¹¹⁵ The impacts along the fish value chain raises concerns about the sustainability of the fisheries sector as an important source of income.

With the construction of new power plants in the region, more and more people are migrating to the area looking for employment. This has led to a substantial increase in market prices and rent costs, thereby making life even harder for the communities that have lost their livelihoods.

Communities report that the fossil fuel projects have led to an increase in teenage pregnancies, STDs, sex work and sexual abuse, linked to young girls dropping out of school due to increased poverty at the family level. The influx of (foreign) workers also contributes to this. Community women report being excluded from the consultation process for the OCTP developments, for which only chiefs and elders were consulted. The concerns of fish processing women and youth about the provision of schools, jobs, and compensation for lost fishing grounds have hence not been adequately addressed. 116

ECONOMIC IMPACTS

Most of Ghana's LNG and energy projects have been contracted without accurate estimates for future demand. Ghana's oil and gas sector is not stable as many factors threaten the future of the industry. Some major issues come from low non-power demand, the procurement of LNG without a long-term plan and also large financial exposure with Take-or-Pay contracts. As a consequence, there is an excess of supply that is underpriced and therefore leads to a rapid rise in debts. This has already led to an excess in the supply of gas, dropping the price of gas considerably. Furthermore, due to the bad take-or-pay contracts, the Ghana National Petroleum Corporation (GNPC) has to pay the private sector for any supplies they cannot sell. This amounted to over \$168 million in 2019.

ENVIRONMENTAL IMPACTS

Construction activities lead to emissions in the form of nitrous oxide, carbon dioxide, sulphur dioxide and particulate matter. These emissions are particularly attributed to earth moving, excavation and transportation activities. The FPSO uses turbines and fuel for power generation and hence is also a contributor to air pollution. Contaminants released in the atmosphere come down as acid rain into the soil and the ocean, thus affecting the fauna and flora of the region. The OCTP project predominantly is set on the seabed. The pipelines, drilling activities and the operation of vessels have the potential to cause seawater turbidity and will also lead to seeping of contaminants (e.g. zinc and arsenic) into the seawater. Heavy metals from the drilling and production activities contaminate the marine ecosystem, leading to a possible accumulation in marine organisms.

CLIMATE IMPACTS

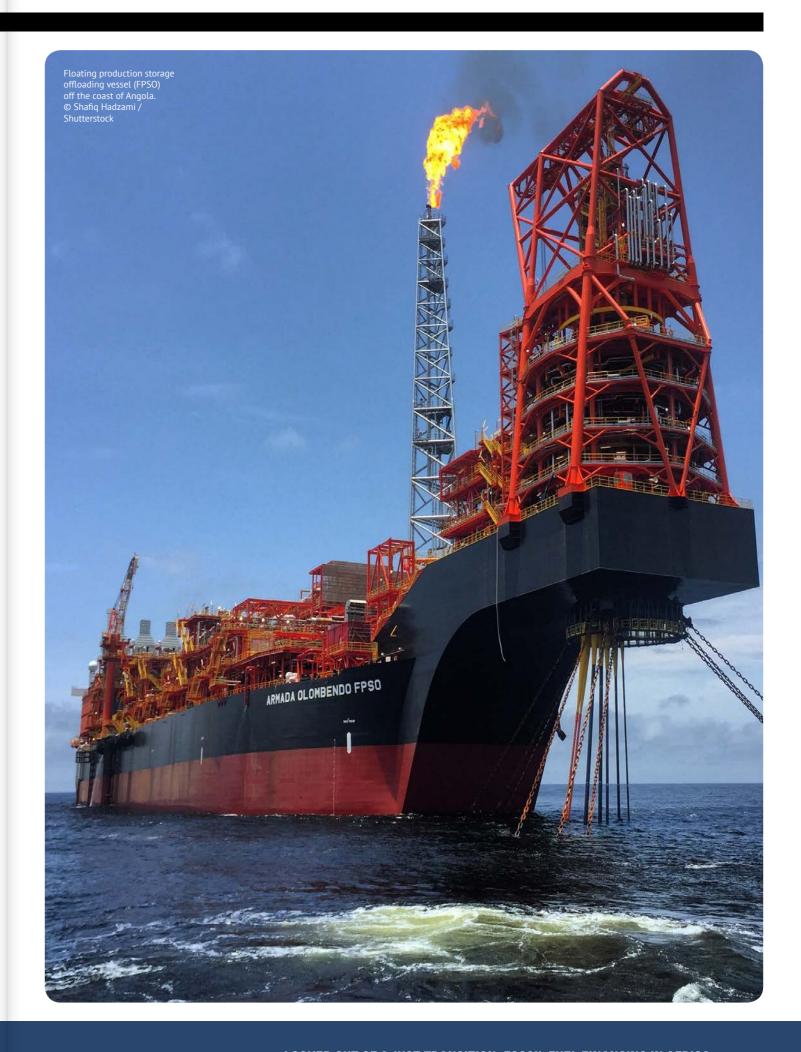
The emissions from the OCTP project originate from operations for well completions (power generation exhaust emissions); FPSO operations (power generation exhaust emissions and non-routine flaring); marine support vessels and helicopters (power generation exhaust emissions); filling, offloading and operation of export tankers (exhaust and fugitive emissions); and dust from increased traffic and dry handling of dry goods. Climate change is manifested in Ghana through: rising temperatures, declining rainfall totals and increased variability, rising sea levels and high incidence of weather extremes and disasters, such as floods.¹²² More than 30 years of climate records show that the prevailing climatic conditions in Ghana have severely deteriorated and are likely to worsen in the future. Climate forecast and climate change scenarios for the country predict a more severe and frequent pattern of droughts and flood events. Ghana is particularly vulnerable due to its reliance on sectors that are sensitive to these impacts, such as agriculture, forestry and energy production. 123

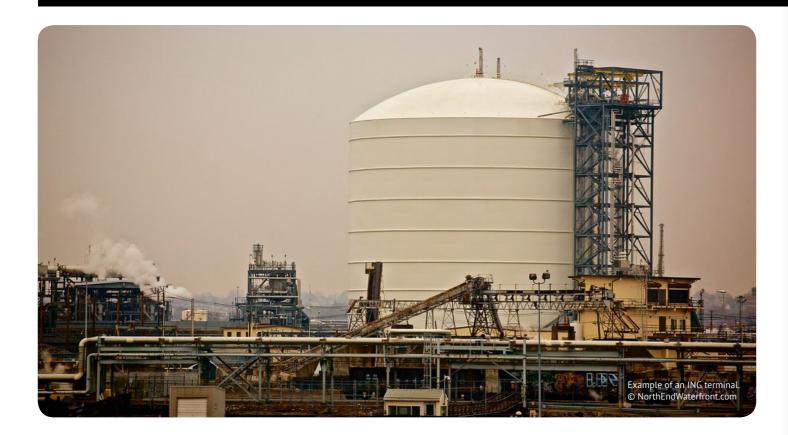
CHALLENGES FOR ENVIRONMENTAL & HUMAN RIGHTS DEFENDERS

Environmental activists, communities and human right activists can freely protest and demonstrate within the confines of the law. However, during election time, civil society organisations whose advocacy and activities are considered to expose the government are tagged as anti-government CSOs and victimised.



Flooded fishing village in Ghana. © Martinez de la Varga / Shutterstock





NIGERIA LNG, TRAIN 7 EXPANSION PROJECT | NIGERIA

ABOUT THIS PROJECT

Nigeria LNG Limited (NLNG) is a liquified natural gas (LNG) terminal on Bonny Island in the Niger Delta. It currently consists of six processing units (trains), two export jetties, eight storage tanks, and six gas pipelines that transverse 110 communities. The plant is owned by the Nigerian National Petroleum Corporation (NNPC), Shell, TotalEnergies and Eni. It became operational in 1999 and has been expanded since then. The moment, NLNG has a production capacity of 22 million tonnes of LNG per year. However, the plant is about to be expanded again with the addition of a seventh train, which would increase annual production to over 30 million tonnes. The construction of Train 7 started mid 2021.

Nigeria LNG has grown to become a leading LNG production site in the Atlantic Basin and transformed Nigeria into one of the largest LNG exporting countries in the world. However, the project has been associated with adverse consequences for local communities, the environment and the climate, linked to gas flaring. 130

FINANCING

The Train 7 expansion project reached a financial close in May 2020 for a total amount of \$2.77 billion. A long list of commercial banks approved financing, including BNP Paribas, SMBC Group, Standard Chartered, Société Générale, ICBC, Deutsche Bank, Bank of China, Santander, and BPCE/Natixis. Public finance institutions African Export-Import Bank, Cassa Depositi e Prestiti, and KfW also provided finance. The project is supported by three ECAs SACE (Italy), K-SURE (South Korea) and KEXIM (Korea Export-Import Bank) who offered guarantees for a total of \$2.77 billion for the loans provided by commercial banks.¹³¹

IMPACTS

SOCIO-ECONOMIC IMPACTS

When the complex was first constructed, communities on Bonny Island were relocated to a reclaimed mangrove area. A military task force was deployed to accompany the relocation process. The relocation of the indigenous people of Old Finima, who traditionally live by the water side, had many implications, including cultural impacts. Locals felt uprooted from their traditional ways of life and the influx of strangers in the Finima community due to the LNG activities contributed to this, as it led to a disregard for indigenous culture, norms and values. The relocation area failed to support community members' traditional sources of income, such as fishing and cultivating certain crops. Two decades have passed since the project started and the relocated population are yet to receive proper compensation. 134

Local communities complain that they have not benefited economically from the LNG project and that it further increased inequality. Field research revealed that, apart from the occasional menial jobs, local inhabitants were not able to find employment via the NLNG project. Jobs that came in the wake of the project went to workers that were brought in from other regions in Nigeria.¹³⁵ As a consequence, people's livelihoods were negatively impacted. The pollution caused by the project further impacts the lives of communities. The gas flaring at the plant has a significant impact on locals' health, with people experiencing kidney problems, lung damage, cancer, and neurological and reproductive problems among pregnant women and infants.¹³⁶

Since the start of the project, the Nigerian government and NLNG's shareholder companies have faced protests from local communities. At the turn of the century, these protests were tragically met with state violence, with many protesters being arrested and detained. ¹³⁷ Opposition from communities remains to date, due to the lack of employment opportunities offered, inadequate compensation, and attempts to acquire their lands. 138 The expansion of the plant with a seventh train means additional land will be cleared. In response, in June 2021, the people of Finima community in Bonny Kingdom staged a protest against the alleged lack of recognition and regard for them as the host community of NLNG.¹³⁹ The protest was staged ahead of the ceremony for the Train 7 project of the NLNG and led to the temporary shutting down of the facility.¹⁴⁰ The local opposition has been met with security forces brought in by the companies and a permanent military and police presence in the region. 141

ENVIRONMENTAL IMPACTS

The Niger Delta, in which the NLNG plant is located, is one of the most polluted areas in the world. Out of the 123 gas flaring sites in Nigeria, around 20 are located on Bonny Island. Frequent gas flaring causes acid rain and pollutes the air, rivers, streams and agricultural land. As a consequence, finding clean water has become difficult and food security is threatened by land degradation and the poisoning of aquatic life. As part of the Train 7 project, up to 31 additional hectares need to be cleared. The land demarcated for clearance consists of swamps and one of the country's most extensive forest zones. This will add to the already high rate of deforestation and will further affect plants and animals, and the biodiversity in the area. Canalisation and an increase in shipping activities to facilitate the gas plant will lead to an influx of sea water further threatening the forest.

CLIMATE IMPACTS

The LNG project will contribute directly to ${\rm CO_2}$ emissions and hence to climate change, as does the clearing of vegetation and forested areas for its construction. Nigeria is already experiencing impacts of climate change just like other developing countries including drought, flooding, irregular rainfall patterns, desert encroachment and deforestation. 148

ECONOMIC IMPACTS

The continued investments in fossil fuel projects by the country and its overall economic fossil fuel dependence is hindering Nigeria's transition efforts. The over-dependence on fossil fuels has greatly reduced its investments in renewable energy, which makes up a small fraction in the country's generated power mix. Despite its abundant fossil fuel resources, Nigeria still has a high debt profile, which makes many citizens question what the oil revenue is used for or if they still need oil as it is not solving the country's basic challenges. The fossil fuel sector has been plagued by various forms of corruption, ranging from money laundering to bribery. The easy money and fraudulent practises that benefit many stakeholders in the oil sector may be the reason why the country is slow in shifting away from this resource.



MALICOUNDA OIL-FIRED POWER PLANT | SENEGAL

ABOUT THIS PROJECT

The Malicounda project is a 120 MW oil-fired power plant under construction located in the village of Keur Maissa Faye, in the rural district of Malicounda in the M'bour Department, approximately 87 km from Dakar, Senegal. Once completed, the power plant will run on heavy fuel oil (HFO) but has the option of running on gas. The project's majority shareholder is Lebanon-based company MP Energy, previously Melec PowerGen (MPG), with 55%. The other shareholders are Africa 50, an infrastructure investment platform, with 30% and SENELEC, the national electricity company of Senegal, with 15%. MP Energy has developed, built and operated two other power plants in Senegal - the 115 MW Tobene power plant and the 67.5 MW Kounoune power plant.

A development agreement was signed in September 2017 between SENELEC and Africa 50¹⁵⁴ and Melec PowerGen joined the project via a tender on October 3, 2017, with Wärtsila as engineering, procurement and construction (EPC) contractor. ¹⁵⁵

Construction started in October 2019 after receiving a licence to operate from the Electricity Sector Regulatory Commission of Senegal.¹⁵⁶ The electricity generated will be sold to Senelec under a 20-year power purchase agreement and will be used domestically.¹⁵⁷ In August 2021, the construction of the power plant was reportedly over 95% complete and the plant was expected to be completed in December 2021.¹⁵⁸ It is unclear whether the plant has started operating at the time of writing.

FINANCING

The project is expected to cost around €150 million, which is approximately \$180 million. The project is to be financed 75% by debt and 25% by equity of the project owners. Part of the debt was financed by long term loans arranged by the African Development Bank (AfDB). In 2018, the AfDB provided €51.3 million, or \$56.9 million, in loans to the project.

In March 2021, the project secured another €75 million, or \$86 million, loan arranged by Orabank Group and further financed by Bank of Africa, La Banque Outarde, and la Financière de l'Afrique de l'Ouest to finalise work on the plant. 162

IMPACTS

SOCIO-ECONOMIC IMPACTS

The project is supposed to generate 300 jobs during the construction phase and 60 jobs during operation. But despite commitments to employ the local population as stated in the ESIA, community members report that most workers employed come from other parts of the country and those who were employed recently lost their job because construction work is coming to an end.¹⁶³

In addition, the communities in the vicinity of the project -Malicounda Ngeurigne (a part of Malicounda Sereer), Malicounda Bambara, and Keur Maissa Faye (a part of Milicounda Wolof) communities - have or will be impacted by the project, as most practice agriculture, trading or fishing for their source of income. 164 The project required the clearing of 18 hectares of land, resulting in thirteen households losing agricultural land and 32 households losing a total of 115 housing plots. In total, 765 people are affected by the project. 165 There was no resettlement process, instead those affected were compensated in cash which was paid before a Resettlement Action Plan (RAP) had been drafted. 166 Those affected did not receive the proper documentation, called a census form, that officially identifies them as an affected person and lists their losses, meaning they were not able to sign anything formally. 167 The compensation proposed in the RAP, 1,500,000 CFA francs (around \$2600) per plot of 300 m², was considered inadequate by the affected households because it did not compensate for the losses suffered. Some affected people have still not received compensation.¹⁶⁸ In addition, community members have not been adequately informed about the risks of the project, or the plans for displacement and existence of a RAP.¹⁶⁹ They were also not consulted on compensation, the environmental and social management plan or the participatory livelihood improvement plans that were drawn up for farming households. 170

Lumière Synergie Développement (LSD), a Senegal-based lobby and advocacy organisation that monitors development finance institutions, filed a complaint concerning the compensation process through the AfDB complaints mechanism. The organisation blames the bank for a lack of project monitoring and

failing to follow up on its recommendations to SENELEC, leading to non-compliance with the Bank's operational safeguards for land acquisition, population displacement and compensation.¹⁷¹

The operation of the power plant involves burning of fuel oil, giving off toxic fumes and emitting smoke and hazardous waste. The resulting air pollution and dust from the project is likely to create health impacts such as dermatological conditions and respiratory ailments for the workers and surrounding communities.¹⁷² The Senegalese Environmental Code stipulates a buffer zone of 500 metres between power plants with high environmental and social impacts, such as Malicounda, and houses and buildings open to the public and yet maps in the ESIA clearly show that this is not the case.¹⁷³ The project therefore not only violates this code but also increases the risk of health impacts occurring.¹⁷⁴

CLIMATE CHANGE

The plant will burn 197,000 tonnes of heavy fuel oil per year at a rate of 540 tonnes per day. This will generate 108,000 tonnes of CO² per year,¹⁷⁵ worsening the climate crisis that Senegal is already facing. More than 70% of the workforce in Senegal is employed or earns an income through agriculture. Rainfall has been inadequate and smallholder agriculture, which is predominantly rainfed, is already experiencing difficulties due to overexploitation of land and degraded soil. Climate change is expected to magnify most of these challenges. In addition, the fishery sector, another large source of employment and diet, stands to be impacted by climate change induced rising surface water temperatures and ocean acidification and housing along the coast is at risk from sea level rise-induced erosion.¹⁷⁶

CHALLENGES FOR ENVIRONMENTAL & HUMAN RIGHTS DEFENDERS

"The challenges that organisations and communities face are mostly related to the environmental and social assessment of projects. These ESIAs are often incomplete or poorly done. When they are done well, the recommendations made may not be respected or implemented because of the strong political support for these types of projects. This is also the case with this project because the design and ESIA is based on a hypothetical switch from an oil-fired power plant to a gas-fired power station in the future." Lumière Synergie Développement, Senegal.



MOZAMBIQUE LNG PROJECT | MOZAMBIQUE

ABOUT THIS PROJECT

In 2010, a vast quantity of natural gas was discovered off the coast of northern Mozambique, in the Cabo Delgado region. The LNG industry in Cabo Delgado is currently made up of three major offshore and partly onshore projects to extract and liquefy gas for export: Rovuma LNG, led by Eni and ExxonMobil; Mozambique LNG, led by TotalEnergies; and Coral South floating LNG (FLNG), led by Eni.¹⁷⁷ This case focuses on the Mozambique LNG project.

The US-headquartered Anadarko Petroleum Corporation initially was the largest shareholder in the Mozambique LNG project, with a 26.5% shareholding until TotalEnergies bought this share in August 2019. The joint venture now consists of TotalEnergies (26.5%), ENH Rovuma (15%), Mitsui E&P Mozambique (20%), ONGC Videsh (10%), Beas Rovuma Energy Mozambique Limit (10%), BPRL Ventures Mozambique (10%), and PTTEP Mozambique (8.5%).¹⁷⁸

The Mozambique LNG project will involve the extraction, liquefaction and transportation of gas from the Area 1 gas fields offshore northern Mozambique, which is expected to take place from 2024 onwards.¹⁷⁹ Gas will be extracted from 20 offshore wells and transported via a 40 kilometre pipeline to an onshore liquid natural gas (LNG) facility covering an area of 17,000 acres. Here the gas will be liquefied and stored in two large tanks. A pipeline will transport the LNG to tankers for export to other countries. The LNG facility is expected to produce 12.9 million tonnes per year of LNG in its initial phase, which can be expanded to 43 million tonnes.¹⁸⁰ Only 12% of the gas extracted will be used in Mozambique, predominantly by industries and businesses linked to the gas sector.¹⁸¹

FINANCING

The project is expected to cost USD 23 billion. In May 2020, TotalEnergies announced it had secured USD 15 billion in financing. A whole range of financial institutions provided loans to the project. These are the public finance institutions African Development Bank, African Export-Import Bank, Cassa Depositi e Prestiti, China Eximbank, Development Bank of Japan, Export-Import Bank of the United States, JBIC, and UK Export Finance (UKEF). The commercial banks that provided finance are Absa Group, Crédit Agricole, FirstRand, IDBI Bank, Industrial and Commercial Bank of China, JPMorgan Chase, MUFG, Mizuho Financial, Nedbank, Shinsei Bank, SMBC, Société Générale, Standard Bank, Standard Chartered, and Sumitomo Mitsui Trust. The ECAs that provided guarantees for this finance are UKEF, SACE, NEXI, ECIC, and Atradius DSB. Société Générale is the financial advisor for the project.

IMPACTS

SOCIO-ECONOMIC IMPACTS

After suffering decades of under-investment and poverty, Cabo Delgado has become the site of violent conflict, which has claimed thousands of lives and left towns and villages in ruins. Throughout history, Cabo Delgado's poor communities have seen their provincial resources, such as gemstones and fossil fuel resources, claimed by national and international economic and political elites and corporations, while their rights have been pushed aside. The LNG project has further fuelled these existing social tensions. The LNG project has further

Development of TotalEnergies Afungi LNG Park, which will house the onshore facilities and airport for the LNG terminals, caused the displacement of over 550 families, including fisherfolk and farmers who lost access to the ocean or land, resulting in loss of livelihoods. Relocated communities who lost their land were meant to receive small plots and cash compensation, however due to the speculation from different industries hoping to supply services to the gas industry, and political elites speculating on increased land values, huge land grabs occurred in the area. The compensation process proved inadequate and at the time of writing almost half the relocated communities are yet to receive their small plots.

In addition, despite TotalEnergies promising replacement jobs, only short-term construction, cleaning, and other unskilled jobs have been made available, which are not deemed adequate by local communities.¹⁹¹ Complaints made by community members have been poorly addressed by TotalEnergies.¹⁹² As a result, formerly self-sustaining villages have been left without livelihoods, and many are now reliant on food aid.

Since 2017, the growing presence of insurgents has led to an escalation of violence in the Cabo Delgado region. The government and companies operating in the region claim that religion is the cause of the violence, however the reality is more complex. The growth of the fossil fuel industry in the region and its impacts on local communities who continue to live in poverty, together with unmet political and corporate promises, has fuelled social unrest.¹⁹³ The insurgent activity has led to an influx of military activity in the region, which has had a devastating impact on the civilian population. Widespread destruction, mass displacement and death has caused untenable humanitarian conditions for the hundreds of thousands who have fled and are now refugees. Insurgents deliberately kill civilians, loot their homes, burn villages and towns and commit atrocities such as beheadings.¹⁹⁴

Women and children, including girls as young as seven, have been abducted by insurgents and made into sex slaves, married off to insurgents, or trafficked over international borders.¹⁹⁵ Some of the women and children held in insurgent bases have been rescued, but many remain missing, and those who have been rescued are held in Pemba awaiting screening and release, according to a recent Human Rights Watch (HRW) report.¹⁹⁶

Mozambican military and police also violently mistreat the civilian population, taking people's property, conducting extrajudicial executions, and committing acts of torture. In 2021, Amnesty International reported that government security forces are also involved in the abuse and rape of women and girls. In 2021, The government also contracted private military companies, such as the Russian Wagner group, on which the EU recently imposed sanctions, and the South African Dyck Advisory Group (DAG), to fight insurgents. In 2021, Amnesty International reported that DAG helicopters were directing machine gun fire at civilian infrastructure, including hospitals, schools, and homes. Witnesses also reported helicopters firing indiscriminately into crowds, or dropping ordnance, without distinguishing between combatants and civilians.

After a deadly attack by the insurgents on the town of Palma in March 2021 that killed dozens of civilians, troops from Rwanda and member states from the Southern African Development Community (SADC) have been deployed to support Mozambican forces in putting down the insurgency.²⁰⁰ Recently, the US and EU have also started to send military missions into the region, resulting in a completely militarised region.²⁰¹ After the Palma attack, TotalEnergies declared force majeure, withdrew staff from the project site and put all activities on hold.²⁰² Since then, compensation payments have also been halted and TotalEnergies has stated that it will not meet its payment obligations to contractors, including local companies, which further undermines people's self-sufficiency. Many of the displaced civilians have moved south and inland into refugee centres or are staying with extended family. Often, as many as 30 or 40 people are crowded into a single-family dwelling, facing difficulties satisfying their most basic needs. 203

ENVIRONMENTAL RISKS

The Mozambique LNG project is located in an area with unique and vulnerable ecosystems important for biodiversity such as mangrove forests, coral reefs and seagrass beds, including the Quirimbas National Park, a UNESCO Biosphere Reserve.²⁰⁴ The project puts these at risk through a range of impacts, including direct destruction of habitats, introduction of invasive species, emissions, and soil erosion. Animals at risk of being impacted by the project include sei whales, Indian yellow nosed albatross, leatherback, and hawksbill turtles, which are considered threatened by the IUCN. The seismic survey has reportedly already led to the death of shallow-water bottom-feeding seagrass fish, shellfish and turtles.²⁰⁵

CLIMATE CHANGE

Mozambique is extremely vulnerable to climate change and is already experiencing the direct consequences. The gas project will release millions of tonnes of greenhouse gases, including methane, every year. The environmental impact assessment of the project estimates the project's direct emissions at 12.9 million tonnes of CO_2 per year. However, environmental groups point out that this underestimates that the proposed LNG facility will release a large amount of methane during the extraction, processing, and transportation of the natural gas, which is 87 times as potent as CO_2 over 20 years. When this is taken into consideration direct emissions are closer to 44.9 million tonnes per year. This is completely at odds with the aim of the Paris Climate Agreement to limit global average temperature rise to preferably below 1.5°C.

ECONOMIC IMPACTS

The gas industry in Cabo Delgado is intrinsically linked to corruption. Mozambique's 'tuna bond' scandal was exposed in 2017, in which the government took an illegal \$2 billion loan from Credit Suisse and VTB Bank, plunging the country into a deep financial crisis.²⁰⁷ It has led to the country's biggest ever corruption trial, international investigations into the major financial players involved, and prison sentences for several bankers. The government had promised to repay the debt in gas revenues. The projected gas revenues allowed the government access to international loans, including these illegal loans.²⁰⁸

The argument used to justify this fossil fuel project is that it would spur industrialisation in Mozambique, fund public investment and help pay off Mozambique's huge amount of debt. However, 95% of the gas from the project will be exported abroad, despite only 30% of the population having access to electricity. In addition, the companies leading the industry have set up tax-free accounts in Dubai, which will ensure that Mozambique loses \$5.3 billion in gas revenues. The outbreak of COVID-19, the escalating violence and falling gas prices have rendered the "gas for development" narrative even shakier.

The global shift in climate and energy policy will likely lead to potentially lower gas revenues, stranded assets and growing debts that will put the country's economic future severely at risk while also locking it into a fossil fuels development pathway which will not serve the people. Mozambique has an enormous renewable energy potential, particularly solar power, but fossil fuel developments such as this project mean that investment in renewables is lacking.²¹² There is no guarantee that any revenue from the project will lead to investment in renewable energy.

CHALLENGES FOR ENVIRONMENTAL & HUMAN RIGHTS DEFENDERS

The conflict has been used to repress civil society, journalists and community leaders. The area has been placed under restricted access, making it impossible to monitor and address the injustices already caused and still occurring. Many journalists and civil society activists, especially those reporting on the violence in Cabo Delgado and its links to the LNG industry, have been arrested or detained without charge over the last couple of years, and some have disappeared.²¹³





WEST AFRICAN GAS PIPELINE / NIGERIA — MOROCCO GAS PIPELINE | WEST AFRICA

ABOUT THIS PROJECT

The West African Gas Pipeline (WAGP) is a 678 kilometre (km) gas pipeline that delivers gas from fields in Nigeria's Niger Delta to markets in Benin, Togo and Ghana, ending in the port city of Takora, Ghana. It is the first regional gas transmission system in sub-Saharan Africa and was conceived in 1982 by the Economic Community of West African States (ECOWAS).²¹⁴ In 1995, the governments of the four African countries signed a Heads of State Agreement, followed by a Memorandum of Understanding in 1999.²¹⁵ The WAGP implementation agreement was signed in 2003, with construction starting in 2005.²¹⁶ The offshore pipeline was completed in December 2006 and scheduled for operation in December 2007, but was plagued by several delays due to detected leaks in the supply pipelines in Nigeria.²¹⁷ The WAGP became operational in 2011.²¹⁸

The project is owned and operated by the West African Gas Pipeline Company Limited (WAPCo), a limited liability company that is made up of a consortium of Chevron (36.9%), Nigerian National Petroleum Corporation (NNPC – 24.9%), an affiliate of the Shell Petroleum Development Company of Nigeria Limited (SPDC -17.9%), Takoradi Power Company Limited, a subsidiary of Volta River Authority of Ghana (16.3%), the Benin Gas Company SA (SoBeGaz – 2%), and Togolese Gas Society SA (SoToGaz – 2%).²¹⁹

The onshore section of the pipeline in Nigeria passes through 33 Nigerian communities. Its 569 km long offshore section starts in southeastern Nigeria (Itoki terminal) and runs through the waters of Benin, Togo and Ghana. The main offshore pipeline runs at an average water depth of 35 metres. Distance from the coast varies between 6.5 and 32.5 km. The WAGP had an initial capacity of 200 million cubic feet of gas a day (mcfd), which is expandable to 600mcfd. Eighty-five per cent of the gas transported by the WAGP is for power generation, the remaining is for industrial applications.

In 2016, an expansion of the WAGP was proposed. An agreement was drawn up between the NNPC and the Moroccan Office National des Hydrocarbures et des Mines (ONHYM) to construct the **Nigeria-Morocco Gas Pipeline**.²²³ This pipeline will connect Nigerian gas to every coastal country in West Africa (Benin, Togo, Ghana, Côte d'Ivoire, Liberia, Sierra Leone, Guinea, Guinea-Bissau, Gambia, Senegal, and Mauritania), ending at Tangiers, Morocco, and Cádiz, Spain.²²⁴ In August 2017, NNPC and ONHYM began a feasibility study for the pipeline, which was completed in January 2019.²²⁵ In June 2021, there were reports that pipeline construction had started, but evidence seems to suggest that the pipeline is still in a preconstruction phase.²²⁶ Construction is expected to take up to 25 years and would be completed in stages by 2046.²²⁷

FINANCING

While the WAGP was initially estimated to cost \$700 million, it was completed at a cost of \$900 million. The World Bank's International Development Association (IDA) provided \$50 million in 2005, and the European Investment Bank (EIB), United States Agency for International Development (USAID) and Overseas Private Investment Corporation (OPIC) provided \$98 million, \$1.6 million and \$45 million, respectively, in 2006. In 2004, the World Bank's International Development Association (IDA) and Multilateral Investment Guarantee Agency (MIGA) provided guarantees worth \$50 million and \$75 million, respectively.

The Nigeria-Morocco pipeline is estimated to cost around \$25 billion. Two institutions that are funding the Front-End Engineering Design (FEED) Study for the project for both Morocco and Nigeria are the Islamic Development Bank (IsDB), for \$45 million in total, and the OPEC Fund for International Development for \$14.3 million.

IMPACTS

SOCIO-ECONOMIC IMPACTS

From the start of the project, environmental groups in West Africa expressed concerns about the pipeline project subverting the four countries' rights to seek alternative energy options, as well as strengthening the energy monopoly of oil giants Chevron and

Shell in the region.²³¹ In 2020,a West Africa sub-regional study was published by civil society groups from Togo, Ghana, Nigeria and the Republic of Benin.²³² The study documented several negative socio-economic impacts linked to fossil fuel projects including the WAGP, as well as community concerns in relation to its expansion to other West African countries. First of all, the security measures put in place - including a restriction zone of about 1 km around the gas pipelines - directly impact the activities of fishermen. The forbidden zones mean access to some key fishing areas is no longer possible. The resulting decrease in fish catch leads to lower incomes for fishermen and women fish processors, affecting communities' livelihoods along the coast. 233 Frontline communities that were consulted for the study expressed they fear losing their jobs due to the fish production in West Africa being impacted by fossil fuel extraction, as well as climate change.²³⁴ This will be exacerbated by the Nigeria-Morocco expansion along the entire West Africa coast. Communities also had to be relocated for the construction of the WAPCo plant and for pipeline facilities. The loss of their houses and lands has made their lives more difficult as compensation processes proved inadequate.²³⁵ The relocation to other sites removed community members from areas they are dependent on for income generation, affecting their income levels and increasing poverty.

ENVIRONMENTAL AND CLIMATE IMPACTS

The emissions resulting from gas extraction contributes to global warming that will worsen the climate change impacts already felt. In the past decade, West Africa's coast has experienced worsening floods, damaging infrastructure, people's homes, and assets, while upending farmers' livelihoods.²³⁶ Deadly torrential rains have wreaked havoc on the coast, threatening communities and ecosystems. Three factors contribute to the degradation of the coast: erosion, flooding, and pollution, mainly triggered by poorly designed infrastructure and inadequate management of their environmental impacts. The World Bank study Effects of Climate Change on Coastal Erosion and Flooding highlights how climate change will affect Benin, Côte d'Ivoire, Mauritania, Senegal, and Togo.²³⁷ By the end of the century, these countries could experience a rise in sea level of more than one metre. 238 The World Bank report warns that the West Africa coast is already at a tipping point, and that climate change will be catastrophic for coastal communities, their health, the natural environment and their livelihoods. As population increases and coastal cities grow, these risks of sea level rise and natural defences crumbling are severe. 239



7. HIGHLIGHTED PROJECTS: PROPOSED FOSSIL FUEL PROJECTS & THEIR IMPACTS

"RECONAFRICA'S OIL AND GAS ACTIVITIES HAVE THE POTENTIAL TO DESTROY CRITICAL AND SENSITIVE HABITATS AND ECOSYSTEMS SUCH AS THE OKAVANGO DELTA, A PROTECTED WORLD HERITAGE SITE, THREATEN ALREADY ENDANGERED SPECIES AND LEAD TO AN INCREASE IN BIODIVERSITY LOSS."

– OIL & GAS DRILLING IN THE OKAVANGO RIVER BASIN. CASE STUDY



EAST AFRICAN CRUDE OIL PIPELINE (EACOP) | EAST AFRICA

ABOUT THIS PROJECT

The East African Crude Oil Pipeline (EACOP) is a planned 1,443 km pipeline that will transport crude oil from the oil fields in Western Uganda to the port of Tanga in Tanzania.²⁴⁰ The crude oil will thereafter be exported to overseas markets for use. The pipeline is expected to transport 216,000 barrels of crude oil per day at peak production and, if built, will be the longest electrically heated crude oil pipeline in the world. France's TotalEnergies (62%), China National Offshore Oil Corporation (CNOOC) (8%), Uganda National Oil Company (15%) and the Tanzania Petroleum Development Corporation (15%) are developing the project.²⁴¹ A final investment decision (FID) was taken on February 1st 2022 and construction is expected to commence in the second half of 2022.²⁴² However, the project has been bedevilled by land acquisition challenges and financing woes and is still seeking a project finance loan of \$3 billion.

Three banks are involved as financial advisors: SMBC of Japan, advising TotalEnergies; Stanbic Bank Uganda, a subsidiary of South Africa's Standard Bank, advising Uganda and Tanzania; and ICBC of China, advising CNOOC.²⁴³ Fifteen commercial banks have said that they will not finance the project.²⁴⁴

IMPACTS

SOCIO-ECONOMIC IMPACTS

Even though construction of the pipeline has not yet officially started, the project has already severely impacted local communities, with women and children being affected most. Land acquisition processes, which commenced in 2018, will see approximately 14,000 households in Uganda and Tanzania

lose land.²⁴⁵ Cut-off dates, after which compensation will not be paid for new permanent developments on land valued and demarcated for the project, were implemented in 2019 in Uganda. From this date, households could not use their land to grow perennial food and cash crops or to set up any new developments, resulting in food stress, reduced family incomes, increased school drop-out rates, and increased gender-based violence.²⁴⁶ Women and youth, who constitute 90% and 38% of Uganda's agricultural labour force respectively, are most affected as they rely on the land to make a living and provide food for their families.²⁴⁷ Over three years after the compulsory land acquisition processes commenced, over 3,000 families from whom land is being acquired in Uganda, are yet to receive compensation.²⁴⁸ Affected families have also raised complaints against unfair compensation rates.²⁴⁹

ENVIRONMENTAL IMPACTS

Nearly 2,000 square kilometres of protected wildlife habitats will be negatively impacted by the EACOP project.²⁵⁰ Among the areas to be impacted by the project are: the Murchison Falls National Park, the Bugoma Forest Reserve, and Taala Forest Reserve in Uganda; and Biharamulo Game Reserve, Wembere Steppe Key Biodiversity Area and two important Ecologically or Biologically Significant Marine Areas (EBSAs) in Tanzania. In all, some 500 km² of wildlife corridors for Eastern Chimpanzees and African Elephants are likely to be severely degraded, and the homes of lions, buffalo, elands, lesser kudu, impalas, hippos, giraffes, zebras, roan antelopes, sitatungas, sables, aardvarks, the red colobus monkey, and sea turtles will be affected.²⁵¹ In addition, the project will directly impact several Ramsar Wetlands of International Importance.²⁵² The pipeline also poses high risks of freshwater pollution and degradation, particularly to the Lake Victoria basin, which the pipeline cuts through for over 400 kilometres.²⁵³ The Lake Victoria watershed is an active seismic area and there are already several accounts of oil spills or seepages in the region. Oil spillages into Lake Victoria would severely impact people's livelihoods as over 40 million people rely on the lake for their water and income.²⁵⁴

CLIMATE IMPACTS

Uganda and Tanzania are already experiencing the impacts of climate change with flash floods, landslides, long dry spells and locust invasions, in both countries. Women and youth, who constitute the biggest percentage of the population working in the agricultural sector, bear the brunt of climate change as

poor weather conditions result in the destruction of crops and lower yields.²⁵⁵ Oil companies' operations in Uganda have been affected by climate change, such as well pads being submerged due to flooding.²⁵⁶ The EACOP project will worsen Uganda and Tanzania's climate change woes. An estimated 34.3 million metric tonnes of carbon will be produced when the crude oil transported by the EACOP at peak production is utilised - more than that currently produced by Uganda and Tanzania combined.²⁵⁷

ECONOMIC IMPACTS

Uganda's national debt stock has shot up as the government borrows money to finance infrastructure and oil projects.²⁵⁸ As of October 2021, Uganda's public debt stands at UGX 73.8 trillion (over \$20 billion).²⁵⁹ The Bank of Uganda estimates that the nominal debt to GDP ratio will reach 52.8% in this financial year (2021/22).²⁶⁰ Part of this debt is money borrowed to finance the Uganda National Oil Company's (UNOC) participation in the EACOP project and to finance roads for the oil developments, as well as an international airport to support the oil sector.²⁶¹ Amidst the increased borrowing, the Ugandan government is struggling to meet its revenue collection targets, causing fears that it will lack capacity to provide critical services such as health and education, especially for women.²⁶²

CHALLENGES FOR ENVIRONMENTAL AND HUMAN RIGHTS DEFENDERS

Environmental and human rights defenders (EHRDs) who speak out against the risks posed by the EACOP and other oil projects have come under increased pressure. Civic space in Tanzania has been so severely constricted that even traditionally active CSOs who have engaged on environmental rights have either faced suspension or deregistration.²⁶³ The Ugandan government has also cracked down on EHRDs and civil society groups. In August 2021, the Ugandan government attempted to stop the activities of 54 civil society groups, including Africa Institute for Energy Governance (AFIEGO).²⁶⁴ In October 2021, AFIEGO staff were arrested four times.²⁶⁵ AFIEGO is one of the foremost civil society groups campaigning for environmental conservation and the respect of communities' rights amidst the EACOP project. Other EHRDs and journalists have also been arrested.²⁶⁶



OIL & GAS DRILLING IN THE OKAVANGO RIVER BASIN | NAMIBIA & BOTSWANA

ABOUT THIS PROJECT

Reconnaissance Energy Africa (ReconAfrica), a junior Canadian based company, has been awarded licences to explore for oil and gas in the Kavango River Basin, one of Africa's most biodiverse habitats. The oil and gas exploration licence area stretches over north-eastern Namibia and north-western Botswana. In January 2021, ReconAfrica started test drilling in the Kavango East region of Namibia to map what the company told investors could be the largest oil play of the decade, claiming the area potentially holds 120 billion barrels of oil.²⁶⁷ Based on its drilling and 2D seismic results, the company proclaimed the presence of a working conventional petroleum system in the Kavango Sedimentary Basin.²⁶⁸

ReconAfrica holds a 90% share of an exploration licence covering over 25,000 km² (6.3 million acres) in Namibia.²⁶⁹ The company plans to increase its share to 95% soon.²⁷⁰ It also holds a 100% share of another licence encompassing around 9,000 km² (2.2 million acres) in northwest Botswana.²⁷¹

If the company does find commercial oil in the area and demonstrates the commercial potential of the Basin, it is entitled to obtain a renewable 25-year production licence in Namibia and Botswana, with the possibility of a 10-year and 20-year extension respectively.²⁷² ReconAfrica maintains that it is currently financing its exploration activities through its own share capital.

Together with environmental groups, local and indigenous communities strongly oppose the oil and gas drilling plans that will negatively affect their sacred land and way of life as well as endanger wildlife and biodiversity.²⁷³

IMPACTS

SOCIO-ECONOMIC IMPACTS

The intensive use and possible contamination of water resources linked to drilling-related activities would have the potential to cause disastrous effects on the local biodiversity and economy.²⁷⁴ Local communities and the Indigenous San and Kavango peoples who live in the region, fear that ReconAfrica's operations will cause adverse impacts to their livelihoods as they rely on fishing, farming, gathering of wild foods and medicines, conservancy-based tourism and other activities. Water is a scarce resource in both Namibia and Botswana, but is essential to life for the population and wildlife in this arid area.²⁷⁵

Many communities and local organisations have reported that they were inadequately consulted by ReconAfrica or were unaware of the oil project.²⁷⁶ KhoiSan leaders in South Africa handed over a petition to the Namibian Embassy in Pretoria, emphasising that the San peoples of Namibia's Free, Prior and Informed Consent (FPIC) had not been obtained for issuance of the exploration licence and commencement of drilling. The KhoiSan therefore stand in solidarity with the Namibian San in rejecting the project.²⁷⁷ Local communities are concerned about the impacts oil drilling activities will have on their land rights and sacred sites. ReconAfrica drilled its second test well on the farm of the Sinonge family in Mbambi village, who did not agree to the use of their land. To obtain its rehabilitation, Andreas Sinonge lodged a complaint before the High Court of Namibia.²⁷⁸ Others feel powerless against the oil company that drills on the land where they grow maize and feed livestock.²⁷⁹

ENVIRONMENTAL IMPACTS

ReconAfrica is carrying out its test drilling operations in close proximity to the Okavango River and upstream from the Okavango Delta, a protected World Heritage Site and inestimable source of water. The licensed area also encompasses part of the Kavango–Zambezi Trans frontier Conservation Area (KAZA TFCA) – known as the world's largest transboundary terrestrial conservation area – and also overlaps with six community conservancies and forests.²⁸⁰ The activities involved in the oil and gas industry have the potential to destroy critical and sensitive habitats and ecosystems such as the Okavango Delta, threaten already endangered species and lead to an increase in biodiversity loss.²⁸¹ The region is home to Africa's largest remaining savanna elephant population and drilling plans will impact their migration corridors.²⁸²

Many voices, including the UNESCO's World Heritage Committee, have expressed their concerns about the impacts of oil exploration and extraction on the wildlife, biodiversity and landscape of the Kavango Basin and underlined the need for a thorough environmental impact assessment prior to any development steps.²⁸³ Saving Okavango's Unique Life (SOUL), a group concerned about the detrimental impacts of oil and gas exploration in the region, have underlined several flaws and inadequacies in ReconAfrica's Environmental Impact Assessments.²⁸⁴

While ReconAfrica only started test drilling last year, a number of issues have already arisen. For instance, the company started drilling operations without the required permits for water consumption and the disposal of wastewater.²⁸⁵ The company has ponds on the exploration sites to store toxic waste water and at least one of these ponds has not been lined with an appropriate impermeable barrier system.²⁸⁶ This could lead to groundwater contamination. In addition, new evidence, including aerial photographs from September 2021, shows that ReconAfrica has bulldozed land for a test oil well inside the Kapinga Kamwalye Conservancy, a protected wildlife area in northeastern Namibia, without proper permissions. Local leaders were even said to have been offered jobs in return for their silence.²⁸⁷

CLIMATE IMPACTS

The African continent is expected to receive the worst climate impacts of any continent. Based on ReconAfrica's oil reserve estimations, Fridays for Future Windhoek calculated that the project could release up to 51.6 gigatonnes of CO₂ into the atmosphere.²⁸⁸

POLITICAL & ECONOMIC IMPACTS

Both the governments of Namibia and Botswana as well as ReconAfrica have issued statements that there would be no fracking in either country.²⁸⁹ However, prior to these statements, ReconAfrica has repeatedly highlighted that its main target was possible shale resources in the Kavango basin, which would require fracking to extract.²⁹⁰ Fracking methods to extract shale resources are associated with numerous proven risks and impacts, with possible disproportionate impacts on women.²⁹¹ The large number of misleading statements by the company with regard to its intentions, including those about fracking, have led to the filing of complaints before American and Canadian regulators to investigate the company's intentions and to provide accurate information to all stakeholders.²⁹²

For more information, see the BankTrack dodgy deal profile on this project *here* and the website of SOUL *here*.



SENGWA COAL POWER PLANT | ZIMBABWE

ABOUT THIS PROJECT

The Sengwa coal-fired power plant is a planned RioZim Limited project. It is located in the Sengwa region in Gokwe South Rural District in the North of Zimbabwe under chief Sayi/ Sai and is settled by Tonga, Shona and Ndebele people.²⁹³ The project was first proposed by the government in 1997 but has been unable to take off due to a lack of investment.²⁹⁴

Besides the power plant itself, the proposed project includes construction of a new power line and a 250 kilometre pipeline that will carry water from Lake Kariba to Sengwa. The power plant is expected to produce 2,800 megawatts (MW) of electricity²⁹⁵ and will use coal from the Sengwa Colliery coal mine that is also owned by RioZim.²⁹⁶ The coal mine, for which exploration already commenced in 1989, has never been fully operational. The Sengwa project emerged as a plan to revitalise the mine and expand its operations. The energy produced by the power plant is meant for both domestic use and export.²⁹⁷

RioZim has reached out to investors and companies to support the project, including several engineering, procurement and construction (EPC) contractors.²⁹⁸ In November 2018, RioZim reportedly signed framework and exclusivity agreements with PowerChina. In March 2020, the company signed a construction agreement for Phase One of the project (700 MW), followed in September 2020 by Phase Two that will expand the capacity of the plant to 2,800 MW.²⁹⁹ China Gezhouba Group Corp., a subsidiary of Power China, is to build the power plant.³⁰⁰ In 2020, it was reported that ICBC was interested in providing a \$3 billion loan to the Sengwa project.³⁰¹ However, the Chinese bank pulled out in June 2021. 302 While an article from September 2021 claimed that ICBC is still interested in the project, RioZim reported a month later that the company was still looking for potential financiers for the project.³⁰³ The project developers started preparatory work in August 2021.304

IMPACTS

SOCIO-ECONOMIC IMPACTS

The majority of the households in the project area live off their land and engage in growing crops, cotton farming, fishing and animal husbandry.³⁰⁵ In its 2020 Annual Report, published in March 2021, RioZim states that it was in the process of concluding the Environmental Impact Assessment (EIA) for the Sengwa project.³⁰⁶ However, to date no EIA has been shared or published. It is therefore difficult to say with certainty what the project requirements are but it is estimated that around 138 km² of land will be needed for the project, not including the land that will fall in the path of the pipeline or power line. Community members living or working on that land will likely be forcibly removed to make way for the construction of the project.³⁰⁷

The Centre for Alternative Development (CAD) estimates that the project could displace thousands of people from their land, disrupting their lives and livelihoods, likely without receiving adequate compensation.³⁰⁸ This estimate is based on the size of the project and experiences with other large infrastructure projects, such as the Hwange coal power plant expansion project, which threatens to displace up to 900 families.³⁰⁹ According to a survey carried out by CAD and Information for Development Trust (IDT), the Sengwa and Gokwe communities have received no information about the RioZim project or the negative impacts it would have on them, nor have they been consulted by the company.³¹⁰ In addition, it is likely that families living near the Sengwa power plant and coal mine will experience health problems due to air pollution, as is also the case in Hwange.³¹¹

ENVIRONMENTAL IMPACTS

The project is located in a dry area which is characterised by high summer temperatures and intermittent rainfall with long periods of scorching heat. The Sengwa River, after which the power plant was named, was found completely dried up by CAD during one of their visits and was declared dead by the community in 2012.³¹² While the region experiences water scarcity, the community has been able to adapt through several mitigation strategies like dry planting and water harvesting.³¹³ However, since local water sources are only just sufficient for agricultural livelihood and domestic purposes, it will be impossible to cater for the power plant and mine's water needs.³¹⁴ The water pipeline is supposed to aid in this by drawing water from Lake Kariba to Sengwa. However, the Lake

already hosts a hydro-power renewable energy project, which will likely be affected by the pipeline, and in January 2020, the Lake only reached 30% of its capacity because of ongoing drought caused by climate change.³¹⁵

With regard to environmental pollution, based on the Hwange coal mine and power plant, a huge amount of air, land and water pollution is expected to arise from the Sengwa project.³¹⁶

CLIMATE IMPACTS

In 2017, the energy sector accounted for 33%, around 12 million tonnes, of the total emissions in Zimbabwe. Of these 12 million tonnes, 37.7% came from thermal power generation.³¹⁷ The Sengwa coal power plant will be the largest coal-fired power plant in Zimbabwe, increasing emissions from thermal power generation and further increasing the risks and impacts of climate change.

Zimbabwe is already experiencing a range of impacts from climate change of which women will bear the heavier burden, as they represent most of the agricultural workforce and are in charge of domestic work. Flooding and drought events have increased the spread of water-borne diseases. Acute shortages of water have already been experienced and a further decline in water availability is expected with resulting consequences for agriculture. Extreme weather events, particularly cyclones, have become a common occurrence in Zimbabwe.³¹⁸ In 2019, the country suffered heavily from the impacts of cyclone Idai which resulted in several deaths and the loss of homes and livelihoods for many. The 2020/2021 la Nina rainy season resulted in catastrophic floods in Zimbabwe and in the 2021/2022 season, Zimbabwe experienced cyclone Ana, along with other African countries, which killed 32 people and damaged 282 houses in Zimbabwe's 13 districts.319

CHALLENGES FOR ENVIRONMENTAL & HUMAN RIGHTS DEFENDERS

According to CAD, environmental activists are often denied access to affected communities and to sensitive information such as agreements, conditions of the project, and risk assessments. This makes it very difficult to provide the affected communities with accurate information about the project. In addition, the resistance to the Sengwa project was seen to be anti-development and unpatriotic.³²⁰



OIL & GAS IN THE VIRUNGA LANDSCAPE | THE DEMOCRATIC REPUBLIC OF CONGO

ABOUT THIS PROJECT

Established in 1925, the Virunga National Park is the oldest protected area in Africa. The Park is located in the eastern provinces of the Democratic Republic of Congo (DRC), in North Kivu, and is classified as a UNESCO World Heritage Site due to its outstanding biodiversity.³²¹ Yet, for the last two decades, this fragile ecosystem has been facing repeated threats of oil exploration. In the DRC, oil is currently only extracted along the Atlantic coast, in the Province of Kongo Central. However, five oil blocks have been delimited across the Albertine Graben in eastern DRC, among which three overlap with 85% of the Virunga National Park.³²²

In 2007 and 2010, the Congolese government granted licences to SOCO International (Block V) and TotalEnergies (Block III) to search for oil, without any restrictions to protect the national park.³²³ Efora Energy, a South-African based company, also received a licence for Block III in 2012.³²⁴ After intense mobilisations, TotalEnergies and SOCO gave up their drilling projects within the Park's borders in May 2013 and June 2014, respectively, but Efora Energy has not given up on its exploration initiatives.³²⁵ On the contrary, the company is looking to renew its exploration permit; has secured an increase in participating interest from 12.5% to 42.5% taken over from TotalEnergies at no cost, and is looking for a partner in the exploration activities.³²⁶

While UNESCO has consistently stated that oil exploration and exploitation is inconsistent with conservation in protected areas, the oil threat regularly resurfaces.³²⁷ In November 2015, the Congolese government confirmed the presence of oil in the National Park and expressed its interest in exploiting these resources.³²⁸ In 2017, Kinshasa signed an 'agreement in principle' to reassign SOCO's Block V in the DRC to another oil company, Oil Quest International, granting the company access to geological, geochemical and geophysical data.³²⁹ The following year, the Congolese Minister of Hydrocarbons mentioned the option of declassifying around 1,720 km² of the Virunga Park (representing 21.5% of its total surface) to allow oil exploration in protected areas.330 The Minister also indicated that the Congolese 2015 Oil Law allows the President to authorise oil exploration in the National Park for the sake of public interest. 331 The announcement led to a petition from local civil society organisations.332

In addition, based on information shared by the Congolese minister of hydrocarbons, the DRC will launch a call for tenders for 16 oil and 3 gas blocks across the country in 2022. Three of the new blocks are expected to be delimited in Lake Kivu, which is located at the southern limit of the Virunga National Park.³³³ It is unclear how exploration in these new blocks will have an impact on the Park.

Uganda's oil ambitions also endanger the Virunga National Park. Indeed, two thirds of Lake Edward, which stretches across the DRC/Uganda border, is part of the Virunga National Park. However, the Ugandan side of Lake Edward includes the Ngaji oil block. In 2016, the Ugandan government authorised 16 oil companies to take part in a bid for oil exploration rights in, among others, the Ngaji oil block. Although Lake Edward was spared during the 2016 oil licensing round, in May 2019, Uganda announced a second oil licensing project affecting the Ngaji oil block.



IMPACTS

SOCIO-ECONOMIC IMPACTS

Oil exploration and extraction in the Virunga National Park comes with high risks. The fishermen of Lake Edward urged president Tshisekedi to prohibit oil extraction as any hydrocarbon pollution would seriously compromise the health and food security of the 50,000 families that rely on the lake's fishing resources.³³⁷ Water contamination would also negatively affect the downstream Semliki River and upstream of the river Nile basin. The development of oil infrastructures also conflicts with tourism activities and would impact the associated revenues.³³⁸

ENVIRONMENTAL IMPACTS

The Virunga National Park spreads over 790,000 hectares and comprises various ecosystems including a tropical forest, the northern Rwenzori Mountains, and several volcanoes. The Park is home to a unique flora and fauna including okapis, large colonies of hippos and around two hundred critically endangered mountain gorillas.³³⁹ The National Park has been on the list of World Heritage in danger since 1994 and exploration is expected to cause adverse impacts to wildlife and biodiversity. Oil exploration opponents also fear that drilling could affect the volcanic activity.³⁴⁰

CLIMATE IMPACTS

Moreover, the Park is located at the eastern end of the Congo Basin, the world's second-largest rainforest after the Amazon. New oil projects do not only contradict the International Energy Agency 2050 net zero roadmap but also put this critical carbon storage ecosystem at risk.³⁴¹

POLITICAL IMPACTS & CHALLENGES FOR ENVIRONMENTAL DEFENDERS

Eastern DRC has been torn apart by violence for years and crisis experts fear that oil exploration could exacerbate insecurity.³⁴² SOCO's activities have been linked to corruption allegations and human rights abuses against oil project opponents.³⁴³

"CONTINUED INVESTMENTS IN FOSSIL FUELS DELAY THE PROCESS FOR A JUST TRANSITION AS THEY ENCOURAGE CONTINUED RELIANCE ON FOSSIL FUELS AS A SOURCE OF ENERGY AND INHIBIT THE GROWTH OF RENEWABLE ENERGY ADOPTION. FURTHER, SUCH INVESTMENTS DENY AFRICA'S SOCIO-ECONOMIC PROTECTION AND IMPROVEMENT, AS WELL AS CLIMATE JUSTICE POSSIBLE THROUGH A SUSTAINABLE ENERGY APPROACH"—350AFRICA.ORG



8. A JUST TRANSITION: WHAT NEEDS TO HAPPEN & HOW FINANCIAL INSTITUTIONS CAN PLAY A ROLE

Africa's natural resources have been extracted and removed at a large scale for use and profit elsewhere. Continued fossil fuel extraction on African soil to supply wealthier countries elsewhere jeopardises the whole planet in terms of climate change, as well as Africans' human rights and the natural environment they depend on. As the previous chapters highlight, local communities face environmental pollution, biodiversity loss, land grabbing and human rights abuses, and destruction of cultural values and symbols and archaeological and identity archives, in the wake of fossil fuel exploitation. The abundance of fossil fuel resources extracted from Africa's soil has not benefited Africa's own energy needs, nor has it brought the promised development, jobs and prosperity.

In 2019, the International Energy Agency predicted that 350 million Africans will be without electricity access and 1 billion without clean cooking access in 2030, despite countries' pledges towards reaching Sustainable Development Goal 7 of achieving universal energy access by 2030.³⁴⁴

The wealthy nations that are mainly responsible for climate change and its impacts – and which continue to benefit from Africa's fossil fuel resources – to date are failing to set the record straight, even though they have the political as well as economic power to do so. It is through this lens of deeply systemic and historic climate injustice that African civil society organisations are developing a Just Transition Framework through which solutions must be shaped. This chapter highlights a Just Transition perspective developed by African organisations and networks, including the African partners of this publication, and the statements and reports mentioned in the Methodology chapter.

RENEWABLE ENERGY ABUNDANCE

The African continent has been called "the Renewable Energy Superpower", as it holds 39% of the world's renewable energy potential, more than any other continent. It holds the richest solar resources in the world and has a huge amount of wind power, small scale hydro and geothermal potential across the continent.³⁴⁵

On a continent with 600 million people currently living in energy poverty, this potential urgently needs to be realised. Many African countries have committed to Sustainable Development Goal seven (SDG 7) of achieving universal energy access for their populations by 2030, which means the continent's electrification rate needs to increase rapidly. Meeting this goal is also linked to other basic needs such as food, shelter, education, healthcare and information access.³⁴⁶ A sustainable future for Africa therefore lies in energy generated from the abundance of its renewable energy sources. The modular nature of many renewable energy technologies and their affordability make these suitable for most African economies.³⁴⁷ Because sun and wind are locally available resources, they can make energy accessible to more people, including remote communities. The renewable energy sector also has a much stronger job creation potential than the fossil fuel sector and hence can provide green income generation opportunities for local populations, including women.³⁴⁸

Per dollar invested, renewable energy generates between two to five times more jobs than fossil fuels. When taking into account other green investments – such as public transit and energy efficient building – between five to twenty-five more jobs are created.³⁴⁹



A JUST TRANSITION

Africa urgently needs a redirecting of fossil fuel finance flows to renewable energy. However, Friends of the Earth Africa stresses some notes of caution: several energy sources currently labelled as renewable, such as hydropower, still contribute to climate change as well as human rights violations and environmental destruction.³⁵⁰

Hydroelectricity is often labelled as a green and renewable source of power. In Africa, the use of hydropower is expected to increase enormously in the next decades, which will lead to an explosion of investments in hydro dams. However, these hydro dams emit a lot of methane, contributing to climate change.351 Climate change will likely also affect the energy provision of existing and future dams. As the African continent is expected to heat up due to climate change, there is a significant risk that dam reservoirs will dry up, which will cause energy shortages. They also have an enormous impact on the environment by flooding sensitive ecosystems and erasing people's livelihoods and heritage. Hydrodam development often leads to land grabbing and human rights violations, especially against those who resist. There is resistance to the development of large hydro dams throughout the continent. One such example is the resistance against the Mphanda Nkuwa Dam in Mozambique, which is expected to create and add to the social and environmental impacts of existing dams in the Zambezi river.352

According to the African partners of this report, as well as recent publications issued by African civil society networks, without a transformational Just Transition approach towards renewable energy – an approach rooted in environmental, social, political, economic and gender justice – the injustices that have plagued the African continent for so long will be perpetuated. A Just Transition requires transforming the current energy system. The way fossil fuel resources have been extracted, managed, distributed and used has not economically benefited Africans and has instead created an ecological as well as social and political breakdown in many African countries. The same could easily happen to the abundant renewable energy potential that Africa harbours, if it follows the same economic model of exploitation.

Metals and minerals, such as cobalt, nickel, lithium and copper, are being mined for the production of renewable energy equipment. However, mining is a sector linked to severe environmental destruction (including in protected and ecosensitive areas); freshwater contamination and depletion; human rights abuses (including gender violence); forced displacement; loss of livelihoods; violent conflict; unsafe working conditions; worker exploitation (forced labour, child labour and human trafficking); and illicit financial flows. Mining also often takes place on indigenous territories. Violence and criminalization often awaits

the people and communities that oppose such projects, including the killing of environmental and human rights defenders that mobilise against mining projects.³⁵⁴ A Just Transition lens must therefore be applied across the entire renewable energy value chain, including, the extraction of metals and minerals linked to renewable energy sources.

As such, we put forward the following Principles for a transformative Just Transition approach to renewable energy:

PRINCIPLES FOR A JUST TRANSITION

- A fast and just systemic change of the energy system can only take place when public and private sector financiers stop new fossil fuel finance and support. Corporations and countries must make their contributions to Africa's climate resilience by directing their investments away from fossil fuels and into renewable energy alternatives. This requires a total and immediate ban on new fossil fuel projects and a managed but rapid phase-out of finance for existing fossil fuel projects and companies. Renewable energy must be generated from climate-safe sources, with low social and environmental impacts.³⁵⁵
- The abundance of sun and wind on the African continent, combined with the falling costs of off-grid wind and solar systems, can provide a sustainable solution to Africa's energy poverty. For African communities to benefit from this potential, it is important to invest in people's knowledge and skills, so they can effectively make use of renewable energy sources and benefit from job creation.³⁵⁶
- It is of crucial importance that renewable energy is people-owned and controlled, and is shaped around the notion of energy as a right. Renewable energy should be accessible to everyone as a common good. African civil society groups warn against the corporate capture and privatisation of Africa's renewable energy potential by transnational corporations. As with fossil fuels, this could risk making the renewable energy sector mainly export driven and largely inaccessible to ordinary citizens.³⁵⁷

"For Just Transition to qualify for Africa, it must be a people-centred energy system and promote a democratised energy system that fosters the participation and ownership of local communities with regards to their energy access. Furthermore, it must be able to strengthen local job opportunities for both men and women, as well as foster energy ownership and democracy, thereby contributing to the overall resilience of a country's population."

- ENVIRONMENT GOVERNANCE INSTITUTE, UGANDA

• Large-scale renewable energy infrastructure, for instance wind and solar farms, are necessary to deliver energy to essential sectors and services and related infrastructure. However, these projects should respect democratic and participative decision-making and adhere to FPIC principles (free, prior and informed consent). Appropriate compensation and remuneration should be provided to affected communities. 358

PRINCIPLES FOR A JUST TRANSITION CONTINUED

- The land rights of local communities and Indigenous Peoples should be central, in order to avoid a renewable energy paradigm that repeats the injustices of the fossil fuel extractivism paradigm. The construction of renewable energy infrastructure should not generate another era of land grabbing and no-access zones, human rights abuses, and environmental destruction. This also applies to the raw material and mineral extraction that is needed for solar panels, wind turbines, and batteries. A renewable energy mining boom is awaiting us, and will generate extractivism that is not without risks if left unregulated, as described above.
- There can not be climate justice without gender justice. In Africa, women are important stakeholders within energy
 systems, hence their involvement, perspectives and empowerment is crucial in achieving an inclusive Just Transition in
 Africa. To date, most national energy policies and projects lack a gender perspective. Insufficient attention has been paid to
 women's energy access, their energy needs, and the interaction between energy-related practices and gender inequity.
- Many African communities and workers have become dependent on the fossil fuel industry. Their rights must also be
 protected and upheld, and they must benefit from the transition to a new energy system by reskilling workers and
 communities. Workers involved in all aspects of the renewable energy system should be assured of their labour rights,
 including the right to freedom of association and collective bargaining, a living wage, and safe, secure and dignified work.³⁶¹

"African countries must put out a universal program to start phasing out fossil fuels."
Plans to implement new fossil energy projects must be urgently put aside. African states must divert national resources to renewable energy projects and the reskilling and retooling of national production. Economies that already depend on fossil energy must invest their profits and surplus in future, eco-friendly industries. Communities that have lived and depended on fossil energy for their livelihoods should be compensated through a planned phase-out, with the support from governments and investment banks. African countries depending on the fossil energy sector require support to facilitate their transition, as they cannot carry the high cost of the shift to a green economy."

- CENTRE FOR ALTERNATIVE DEVELOPMENT, ZIMBABWE

• The current global energy system is unsustainable and unjust. Ensuring sufficient access to sustainable, clean, safe, affordable energy for people in Africa via renewable energy requires energy efficiency and ownership so that profits as well as energy generated does not merely end up in the wealthier parts of the world. There is therefore also a need for **industrialised countries to address their resource consumption** and to reduce their material footprint to stay within a safe operating space. Left unmanaged, the exploding demand for minerals and metals for the renewable energy market is likely to go once again at the expense of countries in the Global South, which hold many of these resources. For example, the EU makes up only 6% of the global population, yet consumes 25-30% of metals produced globally. The EU also has a high import dependency (46%), even more so for rare earth minerals.³⁶² In a context where energy consumption is expected to double by 2060, mining in non-EU, often poor countries will increase significantly. This means countries in the Global South, including many in Africa, risk once more ending up as zones of sacrifice for wealthier countries' growing renewable and digital energy demands. This can be addressed by major economies, like the EU, by regulating disposable consumption, private transportation and digitisation, towards more equitable access to services and low-carbon public transit.³⁶³ It also means prioritising **circular economy solutions** to reduce the overall demand for primary metals and to prevent depletion in a few decades, in line with the highest environmental, health and labour standards, based on fully informed community consent.³⁶⁴

PAYING FOR THE JUST TRANSITION

"My dream for Africa, a continent rich of sun, wind and water, is to have 100% renewable energy based on solar and wind energy as well as small scale dams. All workers or people involved in the fossil sector need to be accompanied progressively to get out from the fossil sector. The transition to renewable energy has to respect human rights, human dignity - the human being must be at the centre of the transition - not profit. Thus developed countries should effectively collaborate and work with Africa on its real needs - not just on the needs of investors and the Global North."

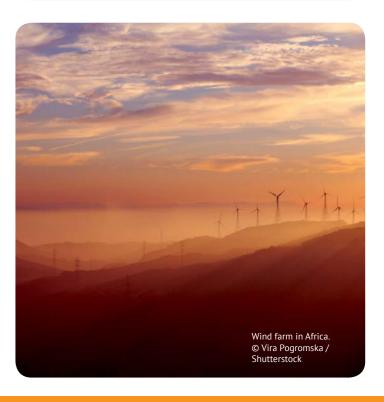
- FRIENDS OF THE EARTH TOGO

According to the African Union, an additional 300 gigawatts (GW) of renewable energy, equivalent to Africa's energy poverty gap, is needed by 2030, and over 2,000 GW by 2050. 365 Africa urgently needs to shift to renewable energy, but to be able to do so, African countries need the financial means. This is problematic, as many African economies lack investment power and are debt ridden, which is linked to decades of inequitable global trade and finance policies. Wealthy nations need to pay their fair share to set the record straight, in ways that do not drive up debts and consolidate global inequities.

According to the latest research by Friends of the Earth (FoE) Africa, which is based on the energy models of academic Dr. Sven Teske, a goal of 100% renewable energy for Africa by 2050 is feasible.³⁶⁶

FoE Africa's "A Just Recovery Renewable Energy Plan for Africa" report outlines the following renewable energy future for Africa, based on the continent's abundant solar and other renewable energy sources:³⁶⁷

- Solar Photovoltaic (PV) distributed across the continent, in stand-alone systems, microgrids and grid-connected installations.
- Wind power, starting in southern African countries which already have stronger grids, as well as some in the more remote eastern and north-western parts of the continent which will require further transmission links.
- Concentrated solar power (CSP) with storage in the northern and southern parts of the continent, providing important flexible balancing power to electricity grids.
- Use of the existing hydro dams, an increase in geothermal capacity and a small amount of bioenergy to provide electricity from non-weather dependent renewable resources.
- Storage through pumped hydro and batteries.
 Offshore wind in coastal areas of southern Africa in regions with an offshore oil and gas industry to support a Just Transition.



Achieving the 100% renewable energy goal by 2050 would require **approximately \$130 billion a year** between now and 2050. Achieving this goal would reduce emissions, build more sustainable economies, as well as generate an estimated **7 million green jobs** across the continent.³⁶⁸ According to networks like Friends of the Earth Africa, it is possible to finance this goal, via a Just Transition approach that addresses fundamental injustices and corrects the long record of historic and current injustices to build a more equitable global order.³⁶⁹ This includes:

- Wealthy nations fulfilling their climate finance commitments: With the signing of the Paris agreement, wealthy nations committed to providing annually \$100 billion in climate finance to developing countries by 2020 and to keep up this commitment to at least 2025. However, to date, this target has not been met.³⁷⁰
- Wealthy nations lifting African nations' debts: A second source of funding should come from Global North countries lifting the debts that many African countries face. This also includes the Global North eliminating tax evasion mechanisms and the continuous flow of illicit funds, which chronically undermines African countries ability to build stronger public finance infrastructures and sectors.³⁷¹
- Reparations for historic injustices: OCI and its African
 partners stress the need for reparations, as many African
 countries to this day pay the price of the social, economic
 and environmental damages caused by decades of colonial
 exploitation and injustices.³⁷²

In addition to public mechanisms, the **private financial sector** also has an important role to play in facilitating a Just Transition, starting with ending finance for new fossil fuel projects immediately and phasing out finance to existing fossil fuels. Instead, they should redirect these investments towards renewable energy projects, following the Just Transition principles presented above. According to the Glasgow Financial Alliance for Net Zero (GFANZ), the private sector could deliver as much as 70% of the capital needed to meet net zero goals.³⁷³ If this same amount of capital would be provided following the Just Transition principles set out in this chapter, achieving 100% renewable energy in Africa by 2050 really appears feasible.

COMMITMENTS & POLICY OF FINANCIAL INSTITUTIONS

Some governments and finance institutions have policies and commitments in place that touch upon aspects of ending fossil fuel finance and financing a Just Transition instead, however the vast majority are not in line with the shifts needed. The Paris Agreement sets out a commitment to make "finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development". In the years following its adoption, an increasing number of financial players have pledged to align their operations with the Paris Agreement. For example, the *Principles for Responsible Banking* (PRB), signed by some 270 banks, includes a commitment to align with the Paris Agreement's goals. More recently, many banks have taken this a step further in pledging to achieve net zero financed emissions by 2050, coming together in initiatives such as the Net Zero Banking Alliance (NZBA) and the Glasgow Financial Alliance for Net Zero. 375 A large proportion of the commercial banks covered in this report are signatories to the PRB, NZBA or GFANZ.³⁷⁶ In addition to banks, a large number of countries, including all but two G20 countries, have also made net zero commitments, albeit with different target dates. 377

Following the IEA's Net Zero by 2050 emissions roadmap, there is already no room for new oil, gas and coal projects and a phase-out of existing fossil fuels is required.³⁷⁸ Private sector financial institutions have made some steps towards excluding or phasing out fossil fuels from their portfolio. Most of the direct exclusions can be found in the coal sector or unconventional oil and gas sectors like tar sands and Arctic oil and gas.³⁷⁹ However, the existing policy exclusions often have significant shortcomings and loopholes. Very few financial institutions have committed to a complete exit from fossil fuels. In terms of the bigger commercial banks, La Banque Postale became the first bank to commit to a complete exit from oil and gas by 2030, in October 2021.³⁸⁰

Most of the major financial institutions have yet to take meaningful steps to meet their commitments under initiatives like GFANZ and the PRBs, such as setting short-to-medium term absolute emission-reduction targets and linking executive and board performance to successfully meeting those targets. In addition, where banks do have plans to reach net zero, these often rely on false solutions such as carbon offsets and unproven new technologies such as carbon capture and storage (CCS). These false solutions not only distract from actually cutting carbon emissions, carbon offset programs also increase the risk of a new surge in demand for land, particularly in low- and middle-income countries, which would lead to mass displacement and hunger.³⁸¹

Public finance has the potential to play a catalytic role in a Just Transition – these institutions play an outsized role in shaping energy systems through government-backed credit ratings, their ability to prioritise outcomes outside of profit margins, and high research and technical capacity. These are benefits that – if wielded alongside a commitment to human rights due diligence, community-led development, and strengthening public goods – are desperately needed for a Just Transition rather than for propping up the fossil fuel industry. There is finally growing momentum to exclude fossil fuels from public finance institutions, though this needs to be scaled up rapidly to stop blocking our chances for a liveable future. Following widespread

commitments to end public finance for coal, a growing group of 'first movers' is beginning to phase out public finance for oil and gas. At COP26 in Glasgow, 34 countries, three national finance institutions and two regional development banks pledged to stop financing fossil fuels abroad. The pledge means that signatories commit to speeding up the transition to a green energy supply and in 2022 will present new policies to end their public funding for fossil fuel projects abroad including through Export Credit Agencies (ECAs), development finance, and their participation in multilateral development banks. However, further clarity and ambition is needed before then to ensure this implementation comes with an increased commitment to fund a Just Transition and no gas loopholes in particular.

The flow of fossil fuel finance to Africa must be stopped for the many reasons set out in this report, and finance needs to be made available to significantly increase support for renewable energy alternatives. The climate summit in Glasgow also saw financial actors and countries pledging to allocate more finance to renewable energy, often referencing a Just Transition.³⁸⁴ However, a truly Just Transition for Africa requires taking a broader systemic and transformative approach, as captured in the principles highlighted in this chapter. Public and private sector financing must move away from the extractivist logic of the current economic model if it is to deliver the sustainable future that Africa needs.



9. RECOMMENDATIONS

STOP FINANCING FOSSIL FUELS

Public and private sector financial institutions should immediately end all financing for fossil fuel expansion projects and for all companies expanding fossil fuel extraction and infrastructure, along the whole fossil fuel value chain, and re-direct support towards decarbonization and Just Transition efforts. There is simply no room left within the 1.5°C scenario for more coal, oil and gas. Similarly, the institutions need to ensure a managed yet rapid phase out of existing fossil support. A comprehensive planning process needs to be put in place to ensure sufficient time for and resources for decommissioning, clean-up and a Just Transition for workers and local communities heavily dependent on fossil fuel production into renewable energy jobs. This is important for addressing climate change, but also for preventing African countries from becoming locked in to fossil fuel production, with disastrous socio-economic, human rights, environmental local impacts and longer term economic impacts.

IMPROVE ACCOUNTABILITY FOR FOSSIL FUEL FINANCING & SUPPORT

A general lack of data from financial actors – whether public or private – makes it difficult to track financial support for fossil fuels and also makes it difficult for affected communities to make their concerns heard. Therefore, governments and public finance institutions should strengthen transparency by publicly disclosing foreign fossil support in their existing portfolios, including progress in relation to any phase out commitments made. Private sector banks should also publicly disclose their finance for fossil fuel projects and companies, including by factoring client consent into standard loan agreements to make this possible.

LEGISLATE FOR HUMAN RIGHTS & ENVIRONMENTAL DUE DILIGENCE, & FOR 1.5°C

To date, banks have only committed to the Paris Agreement on a voluntary basis, if at all. Meanwhile requirements for human rights due diligence, such as the UN Guiding Principles on Business and Human Rights, do not have the force of law and have not been sufficient to prevent or effectively address the many injustices linked to fossil fuel projects and the companies behind them. Governments need to pass national and regional legislation for mandatory human rights and environmental due diligence (mHREDD) that ensures companies including financiers prevent and address violations. They must also legislate to oblige corporations - including the financial sector - to align their portfolios to the Paris Agreement objective to limit climate change to 1.5°C. Regulation should include mandatory annual progress reporting, as verifiable and comparable information on fossil support is essential to be able to monitor financial flows and manage its decline.

PROVIDE SUPPORT & FINANCE FOR RENEWABLE ENERGY ACCORDING TO JUST TRANSITION PRINCIPLES

A Just Transition for Africa means that financiers - both public and private - need to shift finance away from fossil fuels and towards a more socially owned, renewable energy powered, worker and community empowered, climate positive and democratic future. Sustainable and Just Transition financing does not promote false solutions, such as carbon offsets and Carbon Capture and Storage, or harmful green alternatives and ensures that those responsible for the climate crisis pay their fair share for the damages caused and the alternatives that need creating. To combat Africa's energy poverty and ensure people's energy ownership, financiers should support Africa's leapfrogging to democratised, low-cost renewable energy accessible to all, including women, youth, local communities and Indigenous peoples, as well as open sharing of technology and knowledge.

"Climate justice for Africa is not truly climate justice without social and environmental justice and neither is social justice truly social justice without environmental and climate justice."

- 350AFRICA.ORG

ENSURE EXPLOITATIVE & EXTRACTIVIST PRACTISES ARE NOT REPRODUCED IN THE RENEWABLE ENERGY SECTOR

There are a lot of lessons to be learned from the fossil fuel extractive system, both in terms of the climate challenges the world faces today, and the many ugly faces of the fossil fuel resource curse that African communities know so well. Just as with fossil fuel financing and support, companies and financiers need strong environmental and human rights due diligence covering their support for renewable energy, and for mining projects where these are needed to support a Just Transition. Such due diligence needs to include a gender-specific lens, and address the needs of the poor and vulnerable communities. Without strong due diligence, extraction of minerals and metals will have, and is already having, severe human rights and environmental impacts.

Private and public sector financial support for renewable energy projects, and related extraction and infrastructure, needs to be transparent and accountable, just as with finance for fossil fuel finance. Financiers should ensure projects have environmental and social impact assessments conducted and made publicly available, corruption must be prevented, and all human and environmental rights must be respected. They should also disclose their renewable energy portfolios so that stakeholders can monitor them. Regulators should include these factors as they develop mHREDD legislation.

ENSURE AFRICAN COUNTRIES & COMMUNITIES BENEFIT FROM THE RENEWABLE ENERGY RESOURCES THEY HOLD

Currently, African countries that depend primarily on resource extraction are often deeply indebted, constraining their sovereignty over their own economic policies. Also, patents and manufacturing capacity for renewable and other green technologies are currently mostly held in the Global North and China. This obstructs African countries in developing and using their own green technologies, keeping them locked in a vicious cycle of economic dependency. If not addressed, the current economic system will continue to create an energy framework that puts foreign companies first and local people last, with millions of Africans continuing to live in material and energy poverty, despite Africa's abundant renewable energy potential.

A just and equitable transition for Africa can therefore not happen without addressing the unfair economic, trade and investment rules which continue to uphold global inequities. By wealthier nations meeting their climate finance commitments, cancelling Africa's rising debts, addressing tax avoidance and tax evasion and illicit financial flows, and providing reparations for historic injustices, they can lay an important financial foundation for Africa's timely transition to a green, resilient and sustainable economy.



APPENDIX I: SELECTED FOSSIL FUEL PROJECTS & DEVELOPMENTS FOR PROJECT FINANCE DATA

Project/development	Country
Acquisition of 50% in Petrobras Oil & Gas	Nigeria
Acquisition of Eland Oil & Gas	Nigeria
$\label{lem:condition} \mbox{Acquisition of Hess Corporation's Business in Ghana}$	Ghana
Acquisition of Shell's Onshore Assets in Gabon	Gabon
Aenergy Additional Facility 2018	Ghana
Ajaokuta – Kaduna – Kano Pipeline (614 km) PPP	Nigeria
Aker Energy Ghana Offshore Block Bond Facility	Ghana
Amandi Gas-Fired Power Plant (200 MW)	Ghana
Angola LNG Refinancing	Angola
Area 1 Mozambique LNG	Mozambique
Armada Olombendo FPSO	Angola
Atinkou Combined-Cycle Gas Power Plant (390 MW)	Senegal
Azito Gas-Fired Power Plant Phase IV (253 MW)	Côte d'Ivoire
Boikarabelo Coal Mine	South Africa
Bridge Power CCGT Power Plant (400 MW)	Ghana
Bridge Power CCGT Power Plant Phase I (200 MW) Refinancing	Ghana
Cap des Biches Oil-Fired Power Plant (33 MW) Phase II	Senegal
Central Termica de Ressano Garcia (CTRG) Gas- Fired Plant (175 MW) Refinancing	Mozambique
Coral South FLNG	Mozambique
Dangote Lekki Oil Refinery	Nigeria
Freetown Oil-Fired Power Plant (57 MW) IPP	Sierra Leone
Genser Energy Ghana Additional Facility 2019	Ghana
Ghana FPSO Refinancing 2020	Ghana
Ghana Powership (225 MW)	Ghana
Gimi FLNG Production Vessel	Mauritania/ Senegal
GNPC's Sankofa Gas Field Guarantee Facility	Ghana
HQ Peat-fired Power Plant (80 MW) IPP	Rwanda
Hwange Coal-Fired Power Plant Expansion (690 MW)	Zimbabwe
Imaloto Power Plant	Madagascar

Project/development	Country
Kam'mwamba Coal-Fired Power Plant (300 MW) First Phase	Malawi
Kayes Thermal Power Plant (90 MW)	Mali
Kekeli CCGT Plant (65 MW)	Togo
Khanyisa Coal-Fired Power Plant (306 MW)	South Africa
Kossodo 50 MW Power plant	Burkina Faso
Kusile Power Station (4,800 MW)	South Africa
Lamu Coal-Fired Power Plant (1,050 MW) PPP	Kenya
Makhado Coal Mine	South Africa
Malicounda 120 MW HFO IPP	Senegal
Maria Gleta Gas-Fired Power Plant (25 MW)	Senegal
Medupi Coal-Fired Power Plant (4,764 MW)	South Africa
Morupule Coal-Fired Power Plant (300 MW) Expansion IPP	Botswana
Nacala Railway Corridor (912 km) Refinancing	Mozambique
Nigeria LNG Complex Train 7	Nigeria
Offshore Cape Three Points (OCTP) Phase 1	Ghana
Ogbele Refinery Expansion	Nigeria
Okan & Sonam Oil Fields Drilling	Nigeria
Port of Mombasa LPG Terminal	Kenya
Ressano Garcia Gas-Fired Plant (175 MW)	Mozambique
Rotan Power CCGT Power Plant (660 MW)	Ghana
Savannah Petroleum Additional Facility	Niger
Sirakoro 100 MW Thermal Power Plant	Mali
South Africa Virginia LNG Facility Phase 1	South Africa
South Sudan Oil Field(s)	South Sudan
Te Oil-Fired Power Plant (50 MW)	Guinea
Temane Gas-Fired Plant (400 MW)	Mozambique
Thabametsi Coal-Fired Power Plant (557.3 MW) IPP	South Africa
Tobene Oil-Fired Power Plant Expansion (19 MW)	Senegal
Zimbabwe Power Company (ZPC) Power Plants Expansion and Rehabilitation	Zimbabwe

APPENDIX II: PRIVATE-SECTOR FINANCE FOR FOSSIL FUEL PROJECTS

(2016 - JUNE 2021, IN MILLIONS OF US DOLLARS)

Financial Institution	Country	Million US\$
ABN Amro	Netherlands	270
Absa Group	South Africa	569
Access Bank Group	Nigeria	146
Africa Finance Corporation	Nigeria	226
Banco Comercial Portugues	Portugal	50
Bank of China	China	1,743
Banque Centrale Populaire	Morocco	15
Barclays	UK	65
BIL	Luxembourg	15
BNP Paribas	France	562
BTG Pactual	Brazil	250
Cathay Financial	Taiwan	58
CIMB Group	Malaysia	63
Citigroup	USA	190
Crédit Agricole	France	700
Crédit Mutuel CIC Group	France	233
DBS	Singapore	121
Deutsche Bank	Germany	136
DZ Bank	Germany	86
FBN Holdings	Nigeria	86
FCMB Group	Nigeria	101
First Abu Dhabi Bank	UAE	112
FirstRand	South Africa	247
FSDH Merchant Bank	Nigeria	86
Groupe BPCE	France	782
Guaranty Trust Bank	Nigeria	86
HSBC	UK	685
IDBI Bank	India	205

Financial Institution	Country	Million US\$
Industrial and Commercial Bank of China	China	1,944
ING Group	Netherlands	440
Intesa Sanpaolo	Italy	356
Investec Group	South Africa	50
JPMorgan Chase	United States	370
Malayan Banking	Malaysia	63
Manzi Finances	Côte d'Ivoire	15
MCB Group	Mauritius	40
Mitsubishi UFJ Financial	Japan	956
Mizuho Financial	Japan	1,058
Morgan Stanley	USA	58
Nedbank	South Africa	374
Orabank Group	Togo	27
Oversea-Chinese Banking Corporation	Singapore	233
Santander	Spain	86
Shinsei Bank	Japan	50
SMBC Group	Japan	1,733
Société Générale	France	1,469
Standard Bank	South Africa	1,002
Standard Chartered	UK	1,380
Sumitomo Mitsui Trust	Japan	307
UBA Group	Nigeria	161
UniCredit	Italy	365
Union Bank of Nigeria	Nigeria	146
United Overseas Bank	Singapore	63
Zenith Bank	Nigeria	101
GRAND TOTAL		20,729

APPENDIX III: FINANCE FROM NATIONAL DEVELOPMENT FINANCE INSTITUTIONS FOR FOSSIL FUEL PROJECTS

(2016 - JUNE 2021, IN MILLIONS OF US DOLLARS)

Financial Institution	Country	Million US\$
Agence France Development Bank	France	54
Belgian Investment Company for Developing Countries (BIO)	Belgium	17
Cassa Depositi e Prestiti	Italy	736
CDC Group	UK	216
China Development Bank	China	5,283
China Eximbank	China	5,098
Development Bank of Japan	Japan	466
Development Bank of Rwanda	Rwanda	56
Development Bank of Southern Africa (DBSA)	South Africa	321
Export-Import Bank of India	India	56
Export-Import Bank of the United States	USA	4,700
Finnfund	Finland	10
FMO	Netherlands	125
Hungarian Export-Import Bank	Hungary	73
Industrial Development Corporation of South Africa	South Africa	205
JBIC	Japan	4,673
KDB Financial Group	South Korea	474
KfW	Germany	229
Korea Eximbank	South Korea	617
Proparco	France	79
Public Investment Corporation	South Africa	184
Saudi Fund for Development	Saudi Arabia	107
U.S. International Development Finance Corporation (DFC)	USA	187
UK Export Finance	UK	610
US International Development Finance Corporation	USA	200
GRAND TOTAL		24,776

APPENDIX IV: CORPORATE LOANS & UNDERWRITING SERVICES ATTRIBUTABLE TO FOSSIL FUEL OPERATIONS IN WEST, CENTRAL, EAST & SOUTHERN AFRICA (2016 - JUNE 2021, IN MILLIONS OF US DOLLARS)

Financial Institution	Country	Million US
ABN Amro	Netherlands	430
Absa Group	South Africa	1,420
Academy Securities	USA	4
Access Bank Group	Nigeria	60
AF IV Energy LP	United States	58
African Export-Import Bank	Egypt	2,628
Agence France Development Bank	France	106
Agricultural Bank of China	China	356
Ahli United Bank	Bahrain	153
Al Ahli Bank of Kuwait (ABK)	Kuwait	22
ANZ	Australia	286
Arab Banking Cor-poration (Bank ABC)	Bahrain	21
Atlas Mara	British Virgin Islands	20
Banco Bilbao Vizcaya Argentaria (BBVA)	Spain	347
Banco Comercial Portugues	Portugal	7
Bank Mandiri	Indonesia	17
Bank of America	USA	4,406
Bank of Beijing	China	20
Bank of Changsha	China	15
Bank of Chengdu	China	15
Bank of China	China	1,202
Bank of Communications	China	76
Bank of East Asia	China	6
Bank of Hangzhou	China	19
Bank of Hebei	China	26
Bank of Jiujiang	China	38
Bank of New York Mellon	USA	100
Bank of Ningbo	China	280
Bankinter	Spain	21
Banque Misr	Egypt	6
Barclays	UK	5,275
Basler Kantonal-bank	Switzerland	9
Beal Bank	USA	85
Beijing Rural Commercial Bank	China	1

Financial Institution	Country	Million US\$
BFA Holding	Spain	21
BMCE Group	Morocco	22
BMO Financial Group	Canada	217
BNP Paribas	France	2,586
Cadence Bancorp	United States	3
Caixa Geral de Depósitos	Portugal	17
CBZ Bank	Zimbabwe	10
China Construction Bank	China	244
China Development Bank	China	2,819
China Everbright Group	China	19
China Eximbank	China	1,141
China Galaxy Securities	China	145
China Guangfa Bank	China	27
China International Capital Corporation	China	277
China Life Insur-ance	China	14
China Merchants Bank	China	298
China Merchants Group	China	32
China Minsheng Banking	China	783
China Orient Asset Management	China	26
China Zheshang Bank	China	38
CIBC	Canada	106
CIMB Group	Malaysia	1
CITIC	China	490
Citigroup	United States	4,512
Comerica	United States	11
Commerzbank	Germany	232
Commonwealth Bank of Australia	Australia	92
Crédit Agricole	France	2,079
Credit Suisse	Switzerland	640
CSC Financial	China	312
Danareksa Seku-ritas	Indonesia	2
DBS	Singapore	91
Deutsche Bank	Germany	1,913
Development Bank of Southern Africa	South Africa	570

APPENDIX IV: CORPORATE LOANS & UNDERWRITING SERVICES ATTRIBUTABLE TO FOSSIL FUEL OPERATIONS IN WEST, CENTRAL, EAST & SOUTHERN AFRICA (2016 - JUNE 2021, IN MILLIONS OF US DOLLARS) CONTINUED

Financial Institution	Country	Million US\$
DNB	Norway	757
Donghai Securities	China	74
DZ Bank	Germany	58
EFG International	Switzerland	5
Erste Group	Austria	30
Export Development Canada	Canada	101
FCMB Group	Nigeria	33
Fifth Third Bancorp	USA	242
First Abu Dhabi Bank	UAE	38
First Banking Corporation	Zimbabwe	10
First Capital Securities	China	74
FirstRand	South Africa	888
GF Securities	China	19
Goldman Sachs	USA	2,018
Groupe BPCE	France	1,461
Gulf International Bank	Bahrain	6
Guosen Securities	China	26
Guotai Junan Securities	China	52
Hamburg Commercial Bank	Germany	6
Hankou Bank	China	40
HSBC	UK	2,848
Hua Xia Bank	China	2
Huatai Securities	China	19
Huaxi Securities	China	13
Industrial and Commercial Bank of China	China	1,279
Industrial Bank Company	China	33
Industrial Securities	China	13
Infinity Investama	Indonesia	1
ING Group	Netherlands	995
Intesa Sanpaolo	Italy	841
Investec Group	South Africa	307
Investment Corporation of Dubai	UAE	19
Jefferies Financial Group	USA	14
JPMorgan Chase	USA	5,886

Financial Institution	Country	Million US\$
JZ Securities	China	17
KBC Group	Belgium	6
KDB Financial Group	South Korea	298
KfW	Germany	100
Korea Eximbank	South Korea	90
La Caixa Group	Spain	315
Landesbank Baden-Württemberg (LBBW)	Germany	21
Lloyds Banking Group	UK	611
Loop Capital	USA	32
Mediobanca Banca di Credito Finanziario	Italy	191
Mitsubishi UFJ Financial	Japan	1,413
Mizuho Financial	Japan	1,590
Morgan Stanley	USA	2,896
National Australia Bank	Australia	38
National Bank of Canada	Canada	18
NatWest	UK	429
Nedbank	South Africa	1,226
Northern Trust	USA	296
Orient Securities	China	54
Oversea-Chinese Banking Corporation	Singapore	8
Ping An Insurance Group	China	69
PNC Financial Services	USA	46
Postal Savings Bank of China	China	76
Precision Capital	Luxembourg	12
Princeton Capital Management	USA	7
Quanzhou City Commercial Bank	China	13
Rabobank	Netherlands	30
Raiffeisen Bank International	Austria	30
Riyad Bank	Saudi Arabia	9
Royal Bank of Canada	Canada	742
Sanlam	South Africa	22
Santander	Spain	859
Scotiabank	Canada	757

APPENDIX IV: CORPORATE LOANS & UNDERWRITING SERVICES ATTRIBUTABLE TO FOSSIL FUEL OPERATIONS IN WEST, CENTRAL, EAST & SOUTHERN AFRICA (2016 - JUNE 2021, IN MILLIONS OF US DOLLARS) CONTINUED

Financial Institution	Country	Million US
Shanghai Pudong Development Bank	China	222
Shank Williams Cisneros & Co	USA	7
Shanxi Financial Investment	China	2
Shenwan Hongyuan Group	China	60
Shunde Rural Commercial Bank	China	26
Skandinaviska Enskilda Banken	Sweden	30
SMBC Group	Japan	2,015
Société Générale	France	3,271
Standard Bank	South Africa	1,281
Standard Chartered	UK	4,381
Sumitomo Mitsui Trust	Japan	30
Toronto-Dominion Bank	Canada	296
Trade and Development Bank	Burundi	60
Trimegah Securities	Indonesia	1
Truist Financial	USA	47
UBA Group	Nigeria	222
UBS	Switzerland	440
UniCredit	Italy	1,074
Union Bank of Nigeria	Nigeria	93
United Overseas Bank	Singapore	55
US Bancorp	USA	78
Voya Financial	USA	10
Wells Fargo	USA	552
Westpac	Australia	28
Williams Capital Group	USA	14
World Bank	USA	214
Xiamen Bank	China	26
Xiamen City Commercial Bank	China	14
Yorktown Management & Research	USA	3
ZB Bank Ltd	Zimbabwe	10
Zenith Bank	Nigeria	33
Zürcher Kantonal-bank	Switzerland	30
TOTAL		82,479

- Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Ma impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020; Nnimmo Bassey and Anabela Lemos Africa's Fossil-Fuel Tran A Response to "The Divestment Delusion", Foreign Affairs, February 17, 2022; David Vetter, "Africa Could Be Locked Into Fossil Fuel Future, Warns New Report", Forbes, January 11, 2021.
- This includes projects for which operation or construction began before 2016.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa. The case for a just energy transition from fossil fuel production in Africa, Oil Change International, October 2021.
- Noah Browning and Bozorgmehr Sharafedin, "Fossil fuel demand shakes off pandemic in blow to climate fight", Reuters, October 4 2021.
- Research from Profundo based on data from the Global Energy Monitor and data from Oil Change International analysis of Rystad UCube.
- In this report the \$ sign is used to indicate US dollars.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa.
- Research from Profundo based on data from the Global Energy Monitor and data from Oil Change International analysis of Rystad UCube. There are 964 projects in total. Projects that include both
- Research from Profundo based on data from the Global Energy Monitor and data from Oil Change International analysis of Rystad UCube.
- 11. For the total Top 15 companies, see: Bronwen Tucker and Nikki Reisch, *The Sky's Limit Africa*.
- 12. A few examples of actors using the 'fossil fuels bring development' argument:

Standard Chartered: "To reach net zero carbon emissions from our financing by 2050, we are working on our short, medium and long-term strategy to materially reduce our financed emissions from the O&G sector. We are doing so while acknowledging that the sector remains a critical enabler of economic development and employment." See: Standard Chartered, The Transitio

ExxonMobil: "Working in locations around the world, ExxonMobil powers the economy of our neighboring countries with significant investments in economic growth." See: ExxonMobil, "Global Operations", Accessed February 2022;

Macky Sall, President of Senegal: "While the undeniable impacts of climate change continue to be taken into consideration, Senegal is driven towards eradicating energy poverty, and notes that development of the nation should be prioritized above all else. This will be done through oil and gas," See: African Energy Chamber, "Senegalese President Initiates Historic Dialogue with Civil Society d Other Political Actors on the Management of Revenues from the Oil and Gas Industry", December

US EXIM Bank on financing the Mozambique LNG project: In addition to supporting our U.S. workers here at home, there also is little doubt that this transaction will be transformative for the people of Mozambique...LNG production will be a transformational catalyst for Mozambique's economic growth and fiscal revenues." See: Export-Import Bank of the United States, "EXIM Approves \$5 Billion to Finance U.S. Exports to Mozambique LNG Project", September 26, 2019.

- International Energy Agency (IEA), United Nations Development Program (UNDP), and United Nations Industrial Development Organization (UNIDO), Energy Poverty. How to make modern energy access universal?
- 14. IEA, SDG7: Data and Projections, October 2020.
- 15. The World Bank, "Nigeria to Improve Electricity Access and Services to Citizens", February 5, 2021.
- The World Bank, World Bank Global Electrification Database from "Tracking SDG 7: The Energy Progress Report, Accessed February 2022.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa.
- 19. Kingsmill Bond et al., The Sky's the Limit: Solar and wind energy potential is 100 times as much as global energy demand, Carbon Tracker, April 23, 2021.
- 20. Nick Ferris and Josh Rayman, Energy Monitor's power transition tracker; Europe, the Middle East and Africa, Energy Monitor, November 8, 2021.
- 21. United Nations / Framework Convention on Climate Change, Adoption of the Paris Agreement.
- This refers in particular to the partners of BankTrack and Milieudefensie, the organisations that began the research. In addition, limiting the scope in this way helped limit the scale and cost of the project in terms of data collection.
- Research from Profundo based on data from the Global Energy Monitor and data from Oil Change International analysis of Rystad UCube. Also see: Global Energy Monitor, "Projects", Accessed
- 24. Oil Change International, "Shift the Subsidies Database", Accessed February 2022. For a more detailed methodology of the Shift the Subsidies database, see the report Oil Change International and Friends of the Earth US, Still digging: G20 Governments Continue to Finance the Climate Crisis, May 27, 2020.
- 25. African Development Bank, "Corporate Information", Accessed February 2022; Afreximbank, 2020 Annual Report, page 199, March 26, 2021; African Development Bank, "Statement of subscription and voting powers as at 31 December 2021", February 2022.

- 26. 350Africa.org, "A Just Transition our position", Accessed February 2022; Life After Coal Campaign: Earthlife Africa, the Centre for Environmental Rights and groundWork, "Just Trans Agenda", Accessed February 2022; Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeri Togo and Uganda, November 2020; Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa; A Just Recovery Renewable Energy Plan for Africa, Friends of the Earth Africa, endorsed by 50 African civil society organisations, August 2021.
- Kyra Bos and Joyeeta Gupta, "Stranded assets and stranded resources: Implications for climate change itigation and global sustainable development", Energy Research and Social Science, 56, October 2019
- 28. Nick Ferris and Josh Rayman, Energy Monitor's power transition tracker: Europe, the Middle East and Africa, Energy Monitor, November 8, 2021.
- 29. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa.
- 30. For the full disclaimer and explanation on the analysis of geographical origin, see Methodology.
- 31. Atradius DSB, Insurance policies issued in 2021, page 80, January 31, 2022.
- This figure is adjusted to take into account the amount of each company's production generated in West, Central, East and Southern Africa (see Methodology).
- The national development banks and multilateral finance institutions are: China Development Bank, African Fxim Bank, China Fximbank, Development Bank of Southern Africa, World Bank, Agence France Development Bank, Export Development Canada, KfW, Korea Eximbank, Korea Development Bank (KDB), Trade and Development Bank. The rest of the finance comes from 167
- 34. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa. The case for a just energy transition from fossil fuel production in Africa, Oil Change International, October 2021.
- 35. Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021.
- 36. Kaisa Toroskainen, Resource Governance Index: From Legal Reform to Implementation in Sub-Saharan Africa, Natural Resource Governance Institute, April 2019.
- 37. Bronwen Tucker and Nikki Reisch. The Sky's Limit Africa, Oil Change International, October 2021,
- Bantu Lukambo, Innovation pour le Développement et la Protection de l'Environnement (IDPF). Bernardin Nyangi, Solidarité pour la Réflexion et Appui au Développement Communautaire (SORADEC), Olivier Ndoole, Alerte Congolaise pour l'Environnement et les Droits Humains (ACEDH), Samson Lukira, Synergie des Jeunes pour les Droits de l'Homme (SJDDH).
- 39. United Nations Economic Commission for Africa, Illicit financial flows: report of the High Level Panel on illicit financial flows from Africa, 2015.
- The majority of the fossil fuel resources in Africa is in the hands of foreign mainly European and US companies. When oil and gas is in the hands of African countries - such as Nigeria and Angola, the state-owned companies hold 94% of the total share held by African companies. Yet many of these companies have gone through liberalisation in the 90s, which means they transfer less profits for public spending and more to multinational corporations and elites. Source: Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 41. Ibidem.
- 42. Ibidem.
- 43. Jonathan Gaventa, The Failure of 'Gas for Development' Mozambique Case Study, E3G, December 2021.
- 44. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 45. Ibidem.
- 46. Ibidem.
- 47. Jonathan Lain and Tara Vishwanath. "The COVID-19 crisis in Nigeria: What's happening to welfare? New data call for expanded social protection in Africa's most populous country." Africa Can End Poverty. November 2021.
- 48. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021; Galina Alova, Philipp A. Trotter and Alex Money, "A machine-learning approach to predicting Africa's electricity mix based on planned power plants and their chances of success", Nature Energy 6(2), February 2021.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 50. lhidem
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021, A jobs multiplier indicates how important an industry is in indirect job creation in other sectors of the economy. A jobs multiplier of 3, for example, would mean that for every job created by that industry, 2 other jobs would be created in other industries (for a total of 3 jobs).
- 52. Samantha Hargreaves, Women, Gender and Extractivism in Africa. A collection of papers, WoMin, September 2013.
- Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Map mpacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020; Samantha Hargreaves, Women, Gender and Extractivism in Africa. A collection of papers, WoMin, Sentember 2013

- 54. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021
- 55. Ihidem
- 56. lbidem
- Amnesty International, Mozambique: "What I saw is death": War crimes in Mozambique's forgotter cape, March 2021; Human Rights Watch, "Mozambiaue; Hundreds Women, Girls Abducted", December
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- BankTrack, "East African Crude Oil Pipeline (EACOP)", Accessed February 2022.
- A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- World Meteorological Organization, State of the Climate in Africa 2019, 2020.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 64. lbidem.
- 65. lbidem.
- International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
- Global Witness, Overexposed. How the IPCC's 1.5°C report demonstrates the risks of overing oil and gas, April 2019.
- Mercure, JF., Salas, P., Vercoulen, P. et al., "Reframing incentives for climate policy action", Nature Energy 6, 1133-1143, 2021.
- Gaël Giraud, Christian Nicol, Solène Benaiteau, Marion Bonaventure, Valériane Chaaoub, Martin Jego, Audrey Tsanga, Gilles Mitteau, Lorette Philippot, Alexandre Poidatz, Paul Schreiber, Fossil Assets: The new subprimes? How funding the climate crisis can lead to a financial crisis, Institut Rousseau, Les Amis de la Terre France, Reclaim Finance, June 2021.
- Robin Mills, "Why African oil producers need to shift their strategy in post-fossil fuels era", The National News, July 19, 2021.
- 71. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- Thierry Philipponnat, Breaking the climate-finance doom loop. How banking prudential regulation car $\it tackle\ the\ link\ between\ climate\ change\ and\ financial\ instability, Finance\ Watch, June\ 2020.$
- Global Witness, Overexposed. How the IPCC's 1.5°C report demonstrates the risks of overinvestment in oil and gas, April 2019.
- Nick Ferris, "Why investing in green growth is the best economic path forward", Energy Monitor, May 17,
- 75. Extractivism is a term used to describe those activities which remove large quantities of natural resources that are not processed (or processed only to a limited degree), especially for export. Extractivism is not limited to minerals or oil but is also present in farming, forestry and even fishing. In practice, extractivism has been a mechanism of colonial and neocolonial plunder and appropriation. See: Alberto Acosta, Extractivism and neoextractivism: two sides of the same curse, in M. Lang and D. Mokrani, Beyond Development. Alternative Visions from Latin America, Transnational Institute / Rosa Luxemburg Foundation, August 2013.
- White & Case, "Climate change litigation in Africa: Current status and future developments", JD Supra,
- Javier Solana, "Climate change litigation as financial risk", Green Finance 2, Issue 4, October 2020.
- White & Case, "Climate change litigation in Africa: Current status and future developments", JD Supra, November 9, 2021.
- Basel Committee on Banking Supervision, Climate-related risk drivers and their transmission channels, Bank for International Settlements, April 2021.
- Sam Meredith, "Governments and Big Oil were first. The next wave of climate lawsuits will target banks and boards", CNBC, November 11, 2021.
- 81. Friends of the Earth, "Climate: UK government taken to court over Mozambique gas project", December Blair Bateson and Dan Saccardi, Financing a Net-Zero Economy. The consequences of physical climate
- Bank of England Prudential Regulation Authority, Transition in thinking: The impact of climate change on the UK banking sector, September 2018.
- Javier Solana, "Climate change litigation as financial risk", Green Finance 2, Issue 4, October 2020.

risk for banks, Ceres, September 2021.

- Basel Committee on Banking Supervision. Climate-related risk drivers and their transmission channels. Bank for International Settlements, April 2021.
- Blair Bateson and Dan Saccardi, Financing a Net-Zero Economy. The consequences of physical climate risk for banks, Ceres, September 2021.
- 87 Javier Solana, "Climate change litigation as financial risk", Green Finance 2, Issue 4, October 2020.
- Transition in thinking: The impact of climate change on the UK banking sector, Bank of England Prudential Regulation Authority, September 2018.
- Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change Internatinal, October 2021

- 90. Eskom, "Eskom Medupi's last unit achieves commercial operation, marking completion of the project", August 2, 2021; Lauri Myllyvirta, Eskom is now the world's most polluting power company, Centre for Research on Energy and Clear Air (CREA), October 2021.
- 91. Reuters Staff, "UPDATE 1-Exxaro signs Medupi coal supply deal with Eskom", Reuters, March 31, 2010.
- 92. Ahmed Areff, "After billions in cost overruns, design flaws, delays and load shedding, Medupi is finally complete", News24, August 2, 2021; Molefe Seeletsa, "Explosion put Medupi's unit 4 out of service for at least a year, says Eskom", The Citizen, October 21, 2021.
- 93. World Bank, "World Bank Supports South Africa's Energy Security Plans", April 8, 2010; David Hallowes and Victor Munnik, Boom and Bust in the Waterberg: A history of coal mega projects, GroundWork, November 2018.
- 94. BankTrack, "Medupi coal power plant. Financiers", Accessed February 2021.
- 95. Reuters Staff, "South Africa's Eskom signs \$1.5 billion loan agreement with China", Reuters, July 6, 2017.
- 96. New Development Bank, "Environmental Protection Project For Medupi Thermal Power Plant", March
- 97. Dr Mike Holland, Health impacts of coal fired power plants in South Africa, Centre for Environmental Rights and GroundWork, 2017.
- 98. The Citizen, "Medupi's killer fumes: The story of a power station's missing air scrubbers", March 3, 2020. 99. Phillip de Wet, "Eskom was just denied a licence to pollute. Now it is worried about keeping the lights
- on", Business Insider South Africa, December 14, 2021; Eskom, Applications for Postponement of the Minimum Emissions Standards for Eskom's Medupi and Matimba Coal-fired Power Stations, July 2021.
- 100. The Citizen, "Stage 8 load shedding a possibility if Eskom pollutes less", December 15, 2021.
- 101. Lauri Myllyvirta. Air quality and health impacts of doubling the South African standards for SO2 emissions from power plants, Greenpeace, July 3, 2019; Antony Squazzin, "South Africa's Worst Polluter Eskom Wants Emission Exemptions", Bloomberg Quint, December 11, 2019.
- 102. Peter Dube, "SA massive coal plant fails to address power shortage", The EastAfrican, August 11, 2021.
- 103. Ms Keneilwe Ratshomo and Mr Ramaano Nembahe, The South African Energy Sector Report 2019, Department of Energy Republic of South Africa, 2019.
- 104. Cape Business News, "Highest electricity price increase of last decade", June 24, 2021.
- 105. Jesse Burton, Tara Caetano, and Bryce McCall, Coal transitions in South Africa. Understanding the implications of a 2oC-compatible coal phase-out plan for South Africa, IDDRI & Climate Strategies,
- 106. Victor Munnik, Water risks of coal driven meaa projects in Limpopo: the MCWAP and the EMSEZ, University of the Witwatersrand and Friedrich Ebert Stiffung, May 2020.
- 107. David Hallowes and Victor Munnik, Boom and Bust in the Waterberg: A history of coal mega projects, GroundWork, November 2018.
- 108. Reuters Staff, "UPDATE 1-Exxaro signs Medupi coal supply deal with Eskom", Reuters, March 31, 2010.
- 109. Eni, "Eni Starts Gas Production From OCTP Project, Deep Offshore Ghana," July 4, 2018. 110. Eni, "OCTP: Oil and Gas Off the Coast of Ghana", accessed January 2022; GE, "GE Oil & Gas Announces
- \$850M Order with Eni and Partners for Offshore Cape Three Points Block, Ghana", March 16, 2015.
- 112. Ibidem.
- 113. IJGlobal, Accessed January 2022.
- 114 Abibiman Foundation Ghana Friends of the Farth Ghana Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Maj impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- 115. Ibidem.
- 116. Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- 117. Ishmael Ackah, "Why is Ghana's gas sector losing money", Energy for Growth Hub, February 2, 2021.
- 118. Ibidem.
- 119. Eni, Ghana Offshore Cape Three Points oil block development. Phase 2. Final Environmental Impact Statement, July 2015.
- 120. P. A. Sakvi J. K. Efavi , D. Atta-Peters and R. Asare, Ghana's quest for oil and gas: Ecological risks and management frameworks, West African Journal of Applied Ecology 20(1), January 2012. 121. Eni, Ghana Offshore Cape Three Points oil block development. Phase 2. Final Environmental Impact
- Statement, July 2015.
- 122. UNDP, Ghana's national climate change adaptation Strategy, November 2021. 123 Ihidem

FNDNOTES CONTINUED

- 124. Nigeria LNG, "The Plant," Accessed January 2022; "Our Host", Nigeria LNG, accessed January 2022.
- 125. Nigeria LNG, "Shareholders", Accessed January 2022.
- 126. Nigeria I NG. "The Plant." Accessed January 2022.
- 127. Nigeria LNG, "Background", Accessed January 2022.
- 128. Anita Anyango, "Construction begins on Nigeria Train 7 LNG project", Pumps Africa, July 17, 2021.
- Eklavya Gupte, "Nigeria's LNG capacity to grow by 35 % with Bonny plant expansion", S&P Global, December 27, 2019.
- 130. PricewaterhouseCoopers (PwC), Assessing the Impact of Gas Flaring on the Nigerian Economy, 2019.
- 131. IJGlobal, Accessed January 2022.
- 132. Oluyemi Ayorinde Akintoye, Abiodun Komomo Eyong, Peter Agada, Opaminola Nicholas Digha, and Okibe James Okibe, Socio-Economic Implication of Nigeria Liquefied Natural Gas (NLNG) Project in Bonny Local Government Area, Rivers State, Nigeria, Journal of Geoscience and Environment Protection, 4(5), 63–79, January 2016.
- 133. Ibidem
- 134. Edward T. Bristol-Alagbariya, Finima Resettlement for the Nigeria LNG Project, IAIA Special Symposium on "Resettlement & Livelihoods": Concurrent Session on "Emerging Standards, Practices & Frameworks," Manila, Philippines, February 2017.
- 135. Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- Odo Chistopher Emeka, Jude Ikewuchi, and Ogechukwu Ezim, Effects of Prolonged Exposure to Gas Flare on Renal Functions Status of Adult Humans In Finima, Bonny Island, International Journal of Advanced Research and Publications. 3(7), 67–72. July 2019.
- 137. Dr. Ibibia Lucky Worika, Deprivation, Despoilation and Destitution: Whither Environment and Human Rights in Nigeria's Niger Delta, ILSA Journal of International & Comparative Law, Vol. 8:1, 2001.
- 138. Nairaland, "Bonny Youths Protest Against NLNG", September 12, 2017.
- Sahara Reporters, "Protest Rocks Bonny Kingdom, Nigeria Liquified Natural Gas Limited Shut Down", June 10.2021.
- 140. "The Community asserted that for the fact that the NLNG plant is on their land, the company should recognise it as host community in line with the extant provisions of the Nigerian Oil and Gas Industry Content Development (NOGICD) Act 2010. This Act was signed into law on April 22, 2010 by the then President Goodluck Jonathan to provide a governance framework and engagement template for the oil and gas industry as they interface with the communities in their areas of operation. See: Sahara Reporters, "Protest Rocks Bonny Kingdom, Nigeria Liquified Natural Gas Limited Shut Down", June 10, 2021.
- Dr. Ibibia Lucky Worika, Deprivation, Despoilation and Destitution: Whither Environment and Human Rights in Nigeria's Niger Delta, ILSA Journal of International & Comparative Law, Vol. 8:1, 2001.
- 142. Oluyemi Ayorinde Akintoye, Abiodun Komomo Eyong, Peter Agada, Opaminola Nicholas Digha, and Okibe James Okibe, Socio-Economic Implication of Nigeria Liquefied Natural Gas (NLNG) Project in Bonny Local Government Area, Rivers State, Nigeria, Journal of Geoscience and Environment Protection, 4(5), 63–79, January 2016.
- 143. Odo Chistopher Emeka, Jude Ikewuchi, and Ogechukwu Ezim, Effects of Prolonged Exposure to Gas Flare on Renal Functions Status of Adult Humans In Finima, Bonny Island, International Journal of Advanced Research and Publications, 3(7), 67–72, July 2019.
- 144. Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana. Nigeria. Togo and Uganda. November 2020.
- 145. Ibidem
- 146. A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda; Environmental, Social and Health Impact Assessment (ESHIA) for the Train 7 project, Nigeria LNG Ltd, August 2019.
- 147. Abibiman Foundation Ghana, Friends of the Earth Ghana, Environmental Rights Action/ Friends of the Earth Nigeria, Les Amis de la Terre Togo, Environment Governance Institute, Uganda, Friends of the Earth Netherlands / Milieudefensie, and Both ENDS, A Just Transition for Africa? Mapping the impacts of ECAs active in the energy sector in Ghana, Nigeria, Togo and Uganda, November 2020.
- 148. E.M. Okon, B.M. Falana, S.O. Solaja et al., *Systematic review of climate change impact research in Nigeria: implication for sustainable development*, Heliyon, Volume 7, Issue 9, September 2021.
- 149. US AID, "Nigeria. Power Africa Fact Sheet.", Accessed January 2022.
- Kadiri Abdulrahman and Agency Report, "Analysis: Nigeria s rising debts and its economic impact", Premium Times, March 21, 2021.
- Chioma Barbara Achinike, "Nigeria: Anti-Corruption Overview In The Oil And Gas Industry", Mondaq, December 13, 2021.
- 152. Wärtsilä, "Malicounda, Senegal", Accessed February 2022.
- 153. Melec PowerGen, "MP Energy (previously Melec PowerGen Inc) MPE is the Developper, Builder, Owner and Operator of power plants throughout Africa", Accessed February 2022.
- 154. Africa50, "Senegalese President Sall Hails Africa50's Cooperation with Senelec to Develop the Malicounda Power Plant", September 28, 2017.

- Fouad Gemayel, "Matelec construit sa plus grande centrale électrique au Sénégal", Le Commerce Du Levant, May 31, 2018; Wärtsilä, "Malicounda, Senegal", Accessed February 2022.
- 156. Commission de Régulation du Secteur d'Electricité du Sénégal, Avis n 2019/02 relatif à l'attribution d'une licence de production et de vente d'énergie électrique à la société Malicounda Power S.A.S, May 22, 2019; Construction Review Online, "Malicounda Dual Fuel Power Project in Senegal over 95% complete", August 14, 2021.
- Africa50, "Africa50, Melec PowerGen, Senelec and Orabank Group Secure €75 million Syndicated Bridge Loan for Completion of Malicounda Power Plant in Senegal", March 1, 2021.
- Construction Review Online, "Malicounda Dual Fuel Power Project in Senegal over 95% complete", August 14, 2021; MP Energy, "Malicounda Power", Accessed February 2022.
- Africa50, "Africa50, Melec PowerGen, Senelec and Orabank Group Secure €75 million Syndicated Bridge Loan for Completion of Malicounda Power Plant in Senegal", March 1, 2021.
- Melec PowerGen, "MP Energy (previously Melec PowerGen Inc) MPE is the Developper, Builder, Owner and Operator of power plants throughout Africa", Accessed February 2022.
- African Development Bank, "Senegal: African Development Bank Group approves €51.26 million loan for Malicounda Dual Fuel power plant", November 29, 2018.
- 162. Africa50 and Oragroup, "Africa50 and the Orabank Group signed a €75 million syndicated bridge loan to finance the construction of Malicounda power plant in Senegal", March 4, 2021; Par Ediallo, "Bird & Bird advises Oragroup Sa in the financing of the Malicounda power plant", Africa Logistics Magazine, lune 17, 2021.
- 163. African Development Bank, "Senegal 120 MW Malicounda Dual Fuel Power Project", February 2022; Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018; Information from consultation between Lumière Synergie Développement (LSD) and community members.
- 164. Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018.
- Ministry of Petroleum and Energy, Republic of Senegal, Development Project of the 120 MW thermal power plant in Malicounda. Development of a resettlement action plan. Final Report, June 2020.
- Information from consultation between Lumière Synergie Développement (LSD) and community members
- 167. Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018; Information from consultation between Lumière Synergie Développement (LSD) and community members.
- 168. Ministry of Petroleum and Energy, Republic of Senegal, Development Project of the 120 MW thermal power plant in Malicounda. Development of a resettlement action plan. Final Report, June 2020; Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018; Lumière Synergie pour le Développement and le Collectif des Impactés par la Centrale Électrique de Malicounda, Sénéal (**) December 20, 2021.
- 169. Information workshop organised by Lumière Synergie Développement for the Project Affected People; Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018.
- 170. Information workshop organised by Lumière Synergie Développement for the Project Affected People.
- African Development Bank, "Senegal 120 MW Malicounda Dual Fuel Power Project in Senegal -Notice of Registration", January 31, 2022.
- 172. Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018.
- 173. La République du Sénégal, Loi 2001-01 du 15 janvier 2001 portant Code de l'Environnement (Partie législative), 2001; Ministry of Environnent and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environnent and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018.
- 174. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa.
- 175. Ministry of Environment and Sustainable Development (MEDD), Ministry of Petroleum and Energy (MPE), and Department of Environment and Classified Establishments (DEEC) of Senegal, Construction and operation of a 120 dual fuel power plant project in Malicounda, Thies region. Final ESIA report, October 2018.
- 176. USAID, Climate Change risk profile Senegal, January 2017.
- 177. ExxonMobil LNG, "Rovuma LNG Project in Mozambique Awards Onshore EPC Contract," Accessed January 2022; Mozambique LNG, "About the Mozambique Liquefied Natural Gas Project," Accessed January 2022; Club of Mozambique, "Mozambique: Coral South FLNG Project on Schedule AIM Report," June 5, 2020.

- 178. NS Energy, "Mozambique LNG project", Accessed January 2022.
- 179. Mozambique LNG, "Development", Accessed January 2022.
- 180. "About the Mozambique Liquefied Natural Gas Project," Mozambique LNG, Accessed January 2022.
- 181. Rainforest Action Network, "Case Study: Mozambique LNG projects", March 23, 2021.
- Paul Burkhardt, "Mozambique Gas Project Valued Same as Whole Nation's Economy", Financial Post, June 5, 2020.
- 183. "Total announces the signing of Mozambique LNG project financing", Total Energies, July 17, 2020.
- 184. IJGlobal. Accessed January 2022.
- 185. Borges Nhamire and Paul Burkhardt, "Mozambique Picks SocGen to Advise State-Oil Company on Funding", Bloomberg Quint, June 19, 2020.
- 186. Amnesty International, Mozambique: "What I saw is death": War crimes in Mozambique's forgotten cane March 2021.
- 187. Ibidem.
- African Development Bank, Mozambique LNG. Environmental and Social Impact Assessment (ESIA) Summary April 2019.
- Ashoka Mukpo, "Gas fields and jihad: Mozambique's Cabo Delgado becomes a resource-rich war zone", Mongabay, April 26, 2021.
- 190. See: https://ia4chanae.ora/.
- Information provided by Justiça Ambiental/Friends of the Earth Mozambique from interviews with community members.
- 192. See: https://ja4change.org/.
- Amnesty International, Mozambique: "What I saw is death": War crimes in Mozambique's forgotten cape, March 2021.
- 194. Ibidem.
- 195. Human Rights Watch, "Mozambique: Hundreds Women, Girls Abducted", December 7, 2021.
- 196. Ibidem.
- 197. Amnesty International, Mozambique: "What I saw is death": War crimes in Mozambique's forgotten cape. March 2021.
- 198. Ibidem
- 199. Ibidem
- 200. Ja4change, "France, Rwanda and Total: a lethal threesome around Mozambique's gas", October 22,
- Council of the EU, "EU Military Training Mission in Mozambique set to start its operations", October 15, 2021; James Tasamba, "US launches 3rd military training program in Mozambique", Anadolu Agency, February 4, 2022.
- 202. Ja4change, "Total runs from its responsibilities with its force majeure announcement on Mozambique qas", April 29, 2021.
- Amnesty International, Mozambique: "What I saw is death": War crimes in Mozambique's forgotten cape, March 2021.
- JAI/ Friends of the Earth Mozambique, The impacts of the LNG industry in Cabo Delgado, Mozambique, March 2020.
- 205. Ibidem.
- 206. Ibidem.
- Joseph Hanlon, "Mozambique fell prey to the promise of fabulous wealth, now it can't pay nurses", The Guardian, January 27, 2017.
- 08. Ibidem.
- 209. JA!/ Friends of the Earth Mozambique, "Challenging the UK Government in Court: stop financing gas in Mozambique!", December 6, 2021.
- Johnny West and Daniela Q. Lépiz, Too Late to Count: a financial analysis of Mozambique's gas sector, OpenOil, January 2021.
- Leigh Elston and Megan Darby, "Gas Curse: Mozambique's Multi-Billion Dollar Gamble on LNG," Climate Home News, July 10, 2020.
- 212. Ministry of Foreign Affairs, the Netherlands, Final Energy Report Mozambique, July 30, 2018.
- 213. Civicus, "Monitor Tracking Civic Space. Mozambique", Accessed January 2022.
- 214. Hydrocarbons-Technology, "West African Gas Pipeline (WAGP)", Accessed February 2022.
- 215. Ibidem.
- 216 Ihidem
- 217. Claudia Perez Rivas, "West Africa gas delayed", Upstream Online, April 23, 2008.
- 218. Hydrocarbons-Technology, "West African Gas Pipeline (WAGP)", Accessed February 2022.
- 219. The West African Gas Pipeline Company limited (WAPCo), "About us", Accessed February 2022.
- 220. At some sections e.g the south east of Ghana, south of Lome and the Benin–Nigerian frontier the water depth of the pipeline ranges between 50 to 70 metres The West African Gas Pipeline Company limited (WAPCo), "Operations", Accessed February 2022.
- 221. Global Energy Monitor, "West African Gas Pipeline", Accessed February 2022.

- 222. The West African Gas Pipeline Company limited (WAPCo), "Operations", Accessed February 2022.
- 223. Global Energy Monitor, "West African Gas Pipeline", Accessed February 2022.
- 224 Ihidem
- 225 Ihidem
- Construction review online, "Nigeria-Morocco Gas Pipeline Project and all you need to know." December 23, 2021.
- 227. Global Energy Monitor, "West African Gas Pipeline", Accessed February 2022.
- 228. Hydrocarbons-Technology, "West African Gas Pipeline (WAGP)", Accessed February 2022; European Investment Bank, "West African Gas Pipeline", December 2, 2008; World Bank, "3A-West African Gas Pipeline (IDA S/UP)", Accessed February 2022.
- Construction review online, "Nigeria-Morocco Gas Pipeline Project and all you need to know!
 December 23, 2021.
- 230. Islamic Development Bank, "Signature of Financing Agreements related to the Front-End Engineering Design Study Project for Nigeria – Morocco Gas Pipeline", December 20, 2021; OPEC Fund for International Development, "Nigeria-Morocco Gas Pipeline (NMGP) Front End Engineering Study (FEED) Phase II Project", Accessed February 2022.
- 231. Friends of the Earth International, "New African gas pipeline worries civil society", September 9, 2005.
- 232. Les Amis de la Terre Togo, The impacts and potential impacts of oil and gas exploitation on fisheries and consumers: The experience of West African countries. Case studies from six countries in West-Africa, Les Amis de la Terre Togo, 2019-2020.
- 233. Ibidem.
- 234. Ibidem.
- 235. Friends of the Earth International, "New African gas pipeline worries civil society", September 9, 2005.
- International Bank for Reconstruction and Development / The World Bank, Effects of climate change on coastal erosion and flooding in Benin, Côte d'Ivoire, Mauritania, Senegal, and Togo. Technical Report, May 2020.
- 277 ||-:--
- 238. Mauritania and Senegal are likely to see an increase of 0.6 metre by 2050, followed by Benin, Côte d'Ivoire, and Togo with 0.3 metre. Ibidem.
- 239. Repetitive drought worsened by climate change have already forced rural communities to settle on the coast, increasing pressure in this already fragile ecosystem. See: International Bank for Reconstruction and Development / The World Bank, Effects of climate change on coastal erosion and flooding in Benin, Côte d'Ivoire, Mauritania, Senegal, and Togo. Technical Report, May 2020.
- 240. East African Crude Oil Pipeline, "East African Crude Oil Pipeline", Accessed January 2022.
- 241. Ministry of Energy and Mineral Development, Statement to Parliament on the laying of the Host Government Agreement, Tariff and Transportation Agreement and Shareholders Agreement for the East Africa Crude Oil Pipeline, April 28, 2021.
- 242. Uganda Business News, "Uganda hopes for \$10bn in investment as oil firms green light projects", January 31, 2022; Frederic Musisi, "Uganda: Oil Pipeline Company Starts Work Next Month", The Monitor, August 3, 2021.
- 243. Julius Barigaba, "East Africa: Eacop's Financing Blues as Lenders Desert U.S.\$3.5 Billion Project", The EastAfrican, May 3, 2021.
- 244. #StopEACOP, "Don't Bank on EACOP: Who's backing the pipeline and who's ruled it out?", Accessed January 2022.
- 245. Andrew Bogrand, Caroline Brodeur, Devota Mbenna, Joy Akoli Atine, Clare Ayebare, Bashir Twesigye, and Scott A. Sellwood, Empty promises down the line? A Human Rights Impact Assessment of the East African Crude Oil Pipeline, Oxfam International, September 2020.
- 246. AFIEGO. The Energizer. AFIEGO's Monthly Newsletter. October 2020; Issue 10, October 2020.
- Uganda Bureau of Statistics, *The annual agriculture survey 2018 statistical release*, May 2020.
- 248. EACOP, East African Crude Oil Pipeline Project (EACOP) Uganda Resettlement Action Plan (RAP).
- AFIEGO and COTFONE, Petition to TotalEnergies: Address Kyotera & Lwengo EACOP PAP's Grievances, November 3, 2021.
 Robert Ddamulira, Roy Namgera, Ivan Amaniga Ruhanga et al., Safequarding people & nature in the
- WWF and Civil Society Coalition on Oil and Gas in Uganda (CSCO), July 2017.
- 251. BankTrack, "East African Crude Oil Pipeline (EACOP)", Accessed February 2022.
 252. SEI Stockholm Environment Institute, "The East African Crude Oil Pipeline EACOP a spatial risk perspective", April 8, 2021.
- 253. Robert Ddamulira, Roy Namgera, Ivan Amaniga Ruhanga et al., Safeguarding people & nature in the East Africa crude oil pipeline project. A preliminary environmental and socio-economic threat analysis, WWF and Civil Society Coalition on Oil and Gas in Uganda (CSCO), July 2017.
- 254. Kim Aine, "Kibiro Hot Spring power dam to delay over "oil spill", Chimp Reports, April 16, 2020; Andrew Bogrand, Caroline Brodeur, Devota Mbenna, Joy Akoli Atine, Clare Ayebare, Bashir Twesigye, and Scott A. Sellwood, Empty promises down the line? A Human Rights Impact Assessment of the East African Crude Oil Pipeline, Oxfam International, September 2020.
- 255. World Meteorological Organization, State of the Climate in Africa 2019, 2020.
- 256. Ernest Jjingo, "Waters Submerge Cnooc Oil Well Pads", The Observer, December 29, 2021.
- $\textbf{257.} \quad \textbf{AFIEGO,} \textit{AFIEGO comments on EACOP ESIA report submitted to NEMA for action,} \textbf{August 29,2019}.$

FNDNOTES CONTINUED

- Report 2019/20, December 2020.
- 259. The Independent, "Uganda's public debt rises to UGX 73 Trillion", January 7, 2022.
- 260. Bank of Uganda, State of the Economy Report, June 2021.
- 261. Ministry of Finance, Planning, and Economic Development of Uganda, Debt Sustainability Analysis 292. Jeffrey Barbee and Laurel Neme, "Oil exploration company in Okavango wilderness misled investors, Report 2019/20, December 2020.
- 262. The Independent, "URA misses first-quarter revenue targets", October 22, 2021.
- 263 Source from within Tanzania
- 264. Elias Biryabarema, "Uganda suspends work of 54 NGOs, increasing pressure on charities", Reuters August 20, 2021.
- 265. AFIEGO, "Statement on Arrest of AFIEGO staff", October 23, 2021.
- 266. AFIEGO, "AFIEGO and partners demand for release of AFIEGO's Buliisa district field officer", May 26,
- 267. ReconAfrica, "Drilling program now in progress; opening up the deep Kavango Permian Basin, Kalahari Desert", January 11, 2021; James Stafford, "The Largest Oil Play Of The Decade? Interview With Daniel Jarvie", Oil Price, September 1, 2020; Dan Jarvie, Petroleum Potential for Kavango Basin - ReconAfrica, ReconAfrica, September 2020.
- 268. ReconAfrica, "First section of the second well (6-1) provided further confirmation of a working petroleum stem and first report of progress on ESG", June 3, 2021.
- 269. ReconAfrica, "ReconAfrica is a Canadian oil and gas company engaged in the exploration and levelopment of oil and gas in Northeast Namibia and Northwest Botswana—the "Kavango Basin.", Accessed February 2022.
- 270. Charné Hundermark, "Namibia: ReconAfrica Increases Participating Interest in the Kavango Basin", EnergyCapital & Power, February 8, 2022.
- 271. ReconAfrica, "ReconAfrica is a Canadian oil and gas company engaged in the exploration and levelopment of oil and gas in Northeast Namibia and Northwest Botswana—the "Kavango Basin.", Accessed February 2022.
- 272. Wendell Roelf, "Namibia to licence production near Okayango Delta if Canadian firm finds oil". Reuters, November 10, 2021; ReconAfrica, "ReconAfrica announces a new petroleum licence co the Eastern extension of the deep Kavanao Basin & farm-out option gareement". June 11, 2020: ReconAfrica, Newly discovered Kavango basin. Namibia & Botswana. Corporate presentation, February
- 273. Bronwen Tucker, "185 organizations call on Canadian officials to hold ReconAfrica accountable for massive oil and gas plans", Oil Change International, June 4, 2021; Lisa Ossenbrink, "Namibia: Indigenous leaders want big oil out of Kavango Basin", Al Jazeera, April 22, 2021.
- 274. Jeffrey Barbee and Laurel Neme, "Test drilling for oil in Namibia's Okavango region poses toxic risk", National Geographic, March 12, 2021.
- 275. Heather Richardson, "A Big Oil Project in Africa Threatens Fragile Okavango Region", Yale Environment 360, April 22, 2021.
- 276. Jeffrey Barbee and Kerry Nash, "Oil drillers threaten Okavango ecosystem", The Namibian, September 16, 2020; Alex Crawford, "Namibian oil and risk to the Okavango Delta: Fears over threat to one of world's most pristine wildernesses", Sky News, Accessed February 2022; Jim Tam, "Alarm as explorat drilling for oil begins in northern Namibia", Mongabay, December 28, 2020.
- 277. First People Southern Africa, "SAN Petition to Stop ReconAfrica's Drilling operations in the Okavango", Accessed February 2022.
- 278. High Court of Namibia, Andreas Sinonge vs ReconAfrica, 2021.
- 279. Alex Crawford, "Namibian oil and risk to the Okavango Delta: Fears over threat to one of world's most pristine wildernesses", Sky News, Accessed February 2022
- 280. Heather Richardson, "A Big Oil Project in Africa Threatens Fragile Okavango Region", Yale Environment360, April 22, 2021.
- 281. Fridays For Future Digital and Kavango Alive, "Save Okavango Delta amplification toolkit. Background rmation", Accessed December 2021.
- 282. Jeffrey Barbee and Laurel Neme, "Oil company exploring in sensitive elephant habitat accused of ignoring community concerns", National Geographic, May 11, 2021. 283. Sheree Bega, "Canada's ReconAfrica oil and gas exploration in Namibia and Botswana worries World
- Heritage Committee", Mail & Guardian, August 2, 2021.
- 284. Save the Okavango Delta (SOUL), "ReconAfrica comes for the treasure of the Okavango", November
- 285. Ministry of Agriculture, Water and Land Reform, Republic of Namibia, "Media Response-page1 National Geographic oil exploration in the Kavango Basin", March 17, 2021.
- 286. Jeffrey Barbee and Laurel Neme, "Oil company accused of drilling in African wildlife reserve, offering jobs for silence", National Geographic, December 13, 2021.
- 288. Fridays for Future Windhoek, "Fridays for Future: ReconAfrica's Kavango oil and gas play is 'carbon bomb' with projected 1/6 of world's remaining CO2 budget", March 31, 2021,
- 289. Ministry of Mines and Energy, Government of Namibia, "No fracking activities will be conducted in the Okavango Delta", September 18, 2020; The Namibian, "Botswana denies fracking claims", February 2021; Ed Reed, "ReconAfrica denies frack plans for Namibia", Energy Voice, September 23, 2020.
- 290. ReconAfrica, Kavango Basin research report, May 2020.

- 258. Ministry of Finance, Planning, and Economic Development of Uganda, Debt Sustainability Analysis 291. Concerned Health Professionals of New York, & Physicians for Social Responsibility, Compendium of scientific, medical, and media findings dem Instrating risks and harms of fracking (unconventional age and oil extraction) (7th ed.), December 2020; Héctor Herrera, "The legal status of fracking worl An environmental law and human rights perspective", The Global Network for Human Rights and the Environment, January 6, 2020.
 - complaint to SEC says", National Geographic, May 21, 2021; Center for International Environmental Law (CIEL), "Civil society groups ask TSX Venture Exchange to set record straight on oil and gas drilling in the Okavango region", September 16, 2021.
 - 293. African Financials, "RioZim Limited (RIOZ.zw)", Accessed February 2022; International Centre for Sustainable Carbon, "China to help build US\$3 billion Senawa coal plant", April 30, 2020.
 - 294. Freedom Mupanedemo, "Electric rail system on cards minister", The Herald January 22, 2018.
 - 295. International Centre for Sustainable Carbon, "China to help build US\$3 billion Sengwa coal plant", April 30 2020
 - 296. Martin Kadzere, "Foreigners eye RioZim's Sengwa", The Herald, February 17, 2014.
 - 297. Engerati, "Zimbabwe's New Power Station-Much Needed Power for Southern Africa", Accessed January
 - 298. Martin Kadzere, "Foreigners eye RioZim's Sengwa", The Herald, February 17, 2014; Prosper Ndlovu, Eskom eyes 2,400 MW Sengwa power project", Chronicle, July 2, 2015.
 - 299. Leju Finance, "China Power Construction: 7.913 billion yuan signed EPC contract for coal-fired power Construction (China Power Construction). plant project in Zimbabwe", March 16, 2020; The Herald, "RioZim inks deal for Sengwa Phase Two", September 28, 2020
 - 300. International Centre for Sustainable Carbon, "China to help build US\$3 billion Sengwa coal plant", April 30, 2020.
 - 301 Ihidem
 - 302. Ray Ndlovu and Antony Sguazzin, "Biggest China Bank Walks Away From \$3 Billion Zimbabwe Coal Plan", Bloomberg, June 30, 2021.
 - 303. The Herald, "RioZim Senawa deal still on track". September 6, 2021; Kudzanai Gerede, "Senawa Coal wer Project Hangs in the Balance", AllAfrica, October 6, 2021.
 - 304. Construction Review Online, "Zimbabwe to commence construction of Sengwa thermal power station", August 15, 2021.
 - Zimbabwe Environmental Law Association (ZELA) and Centre for Natural Resources Governance (CNRG), Sengwa Coal plant Project. Political-Economy of the project and its likely ironment rights, June 22, 2020; Information retrieved by the Centre for Alternative Development (CAD) during field visits to the Sengwa community. The Centre for Alternative Development is a women-led, women driven initiative based in Zimbabwe founded by a group of women in development, gender, media, and grassroots women committed to development and climate justice for women in Africa. The organisation visited Sengwa twice in 2020 and they are still in touch with the community members
 - RioZim Limited, Annual report 2020, March 18, 2021.
 - 307. Zimbabwe Environmental Law Association (ZELA) and Centre for Natural Resources Governance (CNRG), Sengwa Coal plant Project. Political-Economy of the project and its likely impacts on social nt rights, June 22, 2020; Tanaka Mrewa, "Sengwa coal plant detrimental to mining communities". CITE, May 22, 2020.
 - 308. Information from CAD: Zimbabwe Environmental Law Association (ZELA) and Centre for Natural Resources Governance (CNRG), Sengwa Coal plant Project. Political-Economy of the project and its likely impacts on social & environment rights, June 22, 2020.
 - 309. ZW News, "Over 880 households in Hwange, Ingagula face relocation to pave way for ZPC expansion project", May 20, 2021; Business & Human Rights Resource Centre, "Zimbabwe: Over 600 families may be displaced if mining takes place in Dinde village Hwange" March 18, 2021. Other examples of large-scale displacement in projects in Zimbabwe: Human Rights Watch, "Zimbabwe: Thousands of Villagers Facing Eviction", March 6, 2021; Kubatana, "When the politically connected destroy livelihoods with impunity: Who will stand for the poor?", September 1, 2021.
 - 310. Brenna Matendere, "US\$3bn Sengwa coal project causes uproar", The Standard, May 17, 2020.
 - 311. Tapuwa O'bren Nhachi, "Coal investments in Zimbabwe: a misplaced priority", CNRG, August 15, 2020: Zimbabwe Environmental Law Association (ZELA) and Centre for Natural Resources Governance (CNRG), Sengwa Coal plant Project. Political-Economy of the project and its likely impacts on social & ment rights, June 22, 2020.
 - 312. Information retrieved by the Centre for Alternative Development (CAD) during field visits to the
 - 313. Information retrieved by the Centre for Alternative Development (CAD) during field visits to the
 - 314. GroundWork, Covid-19, Unmasking social ills, June 2020.
 - 315. GroundWork, Covid-19. Unmaskina social ills. June 2020.
 - 316. Zimbabwe Environmental Law Association (ZELA) and Centre for Natural Resources Governance (CNRG), Senawa Coal plant Project. Political-Economy of the project and its likely impacts on social & environment rights, June 22, 2020; Centre for Natural Resources Governance (CNRG), Environmental Impact Assessment. Report for Hwange coal mining activities, 2017.
 - 317. Government of Zimbabwe, Zimbabwe Revised Nationally Determined Contribution, page 21, 2021.
 - 318. Idem.
 - 319. Xinhua Net, "At least 32 killed after Tropical Cyclone Ana sweeps across Malawi", January 31, 2022.

- 320. Information and experiences from CAD.
- 321. World Heritage Datasheets. "Virunga National Park". Accessed February 2022.
- 322. Pole Institute, Hydrocarbures dans le Rift Albertine; Opportunites de developpement ou risques l'instabilité?, 2014; InfoCongo, "Parc des Virunga : Controverse autour de l'exploitation du pétrole", Accessed December 2022.
- 323. Save Virunga, "Block V last update", Accessed December 2022; Save Virunga, "Block III last update", May 2019.
- 324. Efora Energy, "DRC- Block III", Accessed January 2022.
- 325. Jeune Afrique. "WWF saisit l'OCDF sur les risques encourus dans le parc des Virunaa". October 7. 2013: WWF, "French oil aiant Total to keep out of Virunaa World Heritage Site", June 3, 2013; Jeune Afrique. "RDC: Soco va mettre un terme à l'exploration pétrolière dans le parc des Virunaa", June 11, 2014.
- 326. Ffora Energy Limited. 2020 Integrated Annual Report, June 28, 2021.
- 327. WWF, "Parc des Virunga: l'UNESCO met en garde contre les activités pétrolières," May 20, 2014.
- 328. Voa Afrique, "RDC: Il y a bien du pétrole sous les Virunga selon des tests effectués par Kinshasa", November 6, 2015; Maud Jullien, "DR Congo seeks Virunga park boundary change", BBC, March 14,
- 329. Save Virunga, "BREAKING: DRC Virunga Park Again Threatened by Oil, links to SOCO", September 12,
- 330. BBC, "DR Congo explores oil drilling allowed in wildlife parks", June 30, 2018.
- 331. South World, "DR Congo. Oil Exploration In The National Parks", July 2018.
- 332. Ecclesial network of the Congo Basin forest, "Pétition : Non à toute initiative visant à désaffecter u déclasser les Parcs Nationaux des VIRUNGA et SALONGA ou une de leurs parties pour exploiter le Pétrole au préjudice de l'Humanité et des Communautés locales en République démocratique du Congo", Sentember 26 2018
- 333. Muriel Devey Malu-Malu, "DRC: Is oil exploitation an economic opportunity or an ecological disaster?", The Africa Report, June 15, 2021.
- 334. Helle Abelvik-Lawson, "Uganda oil drilling threatens World Heritage national park", Unearthed, February 2, 2016.
- 335. Offshore Technology, "Sixteen firms to bid for Uganda oil exploration licence near Lake Edward", February 4, 2016.
- 336. The Independent, "Second oil licensing targets previously abandoned blocks", June 7, 2021; Save Virunga, "Leave Ngaji Block out of Oil Licensing, Protect Queen Elizabeth NP and Virunga Landscape!" June 3, 2019.
- 337. Desk Nature, "RDC: les pêcheurs individuels du lac Édouard appellent le Gouvernement à renoncer à toute initiative visant l'exploitation du pétrole dans le PNVi". November 2, 2020.
- 338. Radio Okapi, "RDC : le Parc national des Virunga a généré plus de 81 millions USD en 2020", March 3, 2021.
- 339. AfrikaVuka, "Keeping up the fight for a fossil free Virunga", June 18, 2021; WWF, "Mountain Gorilla. Facts". Accessed December 2021.
- 340. UNESCO, "Virunga National Park", Accessed December 2021; WWF International, Valeur économique du parc national des Virunaa, 2013.
- 341. Eva McNamara and Olivia Freeman, "Counting Carbon in the Congo Basin", Climate Links, April 22, 2020.
- 342. International Crisis Group, Black gold in the Congo: threat to stability of development opportunity? July 2012.
- 343. Global Witness, "Soco in Virunga: A chronology of accusations, denials and falsities", June 10, 2015; Global Witness, Drillers in the Mist, September 2014; Human Rights Watch, "DR Congo: Investi Attacks on Oil Project Critics", June 4, 2014; BBC, ""Soco paid Congo major' accused of Virunga oil intimidation". June 10, 2015.
- 344. Women often bear the burden of energy poverty as they are expected to gather firewood, leaving them exposed to health risks linked to its collection and burning. IEA, SDG7: Data and Projections Access to Electricity, 2019.
- 345. Carbon Tracker, "Solar and wind can meet world energy demand 100 times over", April 23, 2021; Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021.
- 346. Ibidem
- 347. Ibidem
- 348. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 350. Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021.
- 351. María Elena Hurtado, "Dams raise alobal warming gas", SciDevNet, November 7, 2016.
- 352. IA! Justica Ambiental. "Save the Zambezi River from the Mohanda Nkuwa Dam!". December 16, 2020.
- 353. See for example: Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021; and 350Africa.org, "A Just Transition – our position", Accessed February 2022
- 354. Mmeadhbh Bolger, Diego Mmarin, Adrien Tofighi-Niaki, and Louelle Seelmann, 'Green mining' is a th: The case for cutting EU resource consumption, European Environmental Bureau and Friends of the Earth Europe, October 2021.
- 355. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 356. Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021

- 357. Ibidem.
- 358 Ihidem
- 359 Ihidem
- 360. Marianna Fernandes, If it's not feminist, it's not just. Women's voices, analysis and action towards a just energy transition. Friends of the Earth International, November 2021
- 361. Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021.
- 362. Mmeadhbh Bolger, Diego Mmarin, Adrien Tofighi-Niaki, and Louelle Seelmann, 'Green mining' is a yth: The case for cutting EU resource consumption, European Environmental Bureau and Friends of the Earth Europe, October 2021.
- 363 Ihidem
- 365. Friends of the Earth Africa, A Just Recovery Renewable Energy Plan for Africa, August 2021.
- 366 Ihidem
- 367. Ibidem.
- 368 Ihidem
- 369 Ihidem
- 372. Bronwen Tucker and Nikki Reisch, The Sky's Limit Africa, Oil Change International, October 2021.
- 373. Glasgow Financial Alliance for Net Zero, "Race to Zero, Financing Roadmaps", Accessed February 2022.
- 374. United Nations / Framework Convention on Climate Change, Adoption of the Paris Agreement.
- 375. The commercial banks with net zero commitments can be found here: BankTrack, "Bank net zero commitments". Accessed January 2022.
- 376. Signatories to the PRBs can be found here: UN Environment Program, Finance Initiative (UNEPFI). "Signatories". Accessed January 2022, Members of the NZBA can be found here: UNEPFI. "Net Zero Banking Alliance, Members", Accessed January 2022, The members of GFANZ can be found here: GFANZ, "GFANZ membership", accessed January 2022.
- 377. Climate Action Tracker, "CAT net zero target evaluations", November 2021.
- 378. International Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector, May 2021.
- 379. Policy exclusions for coal from commercial banks can be found here: Reclaim Finance, "Coal Policy Tool", Accessed February 2022. Policy exclusions for coal from public institutions can be found here: IEEEA. "Finance is leaving thermal coal", accessed January 2022, Policy exclusions for oil and gas from commercial banks can be found here: BankTrack, "Banks and oil and gas", Accessed January 2022. Policy exclusions for coal from public institutions can be found here: IEEFA, "Finance is leaving oil and gas", accessed January 2022.
- 380. Reclaim Finance, Friends of the Earth France, and Oxfam France, "French bank La Banque Postale quits oil & gas, sets international precedent", October 14, 2021.
- 381. Aditi Sen and Nafkote Dabi, Tightening the net. Net zero climate targets implications for land and food equity. Oxfam International, August 2021.
- 382. Bronwen Tucker and Kate DeAngelis, Past Last Call. G20 public finance institutions are still bankrolling fossil fuels, Oil Change International and Friends of the Earth US, October 2021. 383. UN Climate Change Conference UK 2021, "Statement on international public support for the clean
- 384. The GFANZ progress report talks about unlocking trillions of dollars needed to fund the green transition and mentions that integrating the principles of 'Just Transition' is considered a best practice for reaching net-zero. See: GFANZ, The Glasgow Financial Alliance for Net Zero. Our progress and plan towards a net-zero global economy, November 2021; Similarly, the same parties that committed to stop financing fossil fuels abroad emphasised the need to support a Just Transition. See: UN Climate Change Conference UK 2021, "Statement on international public support for the clean energy transition." November 4, 2021; A group of multilateral development banks also committed to increase their climate finance and to support a Just Transition. See: Asian Development Bank,

"Collective Climate Ambition — A Joint Statement at COP26 by the Multilateral Development Banks".

energy transition", November 4, 2021.

November 5, 2021.

