A Surge in Support: A Review of 15 Years of OPIC's Energy Financing

Kate DeAngelis | August 2020

980

## Introduction

As 2020 commenced, the U.S. International Development Finance Corporation (DFC) succeeded the Overseas Private Investment Corporation (OPIC) as the U.S. government's lead development finance institution (DFI). The Better Utilization of Investments Leading to Development (BUILD) Act of 2018 created the DFC with a new emphasis on the world's poorest countries with the aim to reduce poverty and support sustainable development.<sup>1</sup> The DFC now has an opportunity to build on the progress and improve upon the policies and investment choices OPIC has made over the last ten years.

In light of the COVID-19 crisis, it is more important than ever for the DFC to choose projects that will improve the lives of local communities and not put their health and environment at risk. The DFC - and the broader DFI community – must ensure its financing of energy projects does not exasperate the spread or the impacts of the pandemic. For example, fossil fuel project construction camps can spread the disease among workers and surrounding communities, and air pollution has been shown to worsen the health outcomes for those who contract COVID-19.<sup>2</sup> Further, the DFC should avoid frontier pro jects that destroy habitats and encourage the spread of zoonotic diseases. Instead, the DFC should focus its resources on projects that support a clean and sustainable environment.



Fossil fuel project construction camp

It is also critical for DFIs, including the DFC, to prioritize addressing climate change when developing policies and making investment decisions. The United Nations and other international institutions continue to find that climate change presents the single greatest threat to development with disproportionate impacts on the world's most vulnerable.<sup>3</sup> In addition, Central Banks and bank regulators are increasingly warning that climate change poses systemic financial risks globally, which will disproportionately impact developing countries.<sup>4</sup> Therefore, DFC's investments must not exacerbate climate change, nor cement the world's dependence on fossil fuels for decades to come. Instead, the DFC must help ease the world's transition to a clean, sustainable energy future by supporting renewables, especially mini- and off-grid projects in the least developed countries, which remain woefully underfunded but integral to achieving universal energy access.<sup>5</sup> This energy support should not include nuclear – even small modular reactors – which is not a cost-effective nor clean means to transition away from fossil fuels.

This issue brief is the second in a series analyzing OPIC's policies and performance and providing recommendations for the DFC in its formative months and years. The first briefing analyzed OPIC's legislatively mandated cap and reduction of the greenhouse gas emissions of its portfolio and provided recommendations for how the DFC could more effectively implement the cap and reduction requirement. This briefing reviews OPIC's support for energy projects over the past 15 years and provides recommendations for the DFC's future energy portfolio, including:

- Continue and increase support for renewables, especially for mini- and off-grid renewables, drawing from OPIC's lessons learned and the good work of the U.S. African Development Foundation;
- End all support for fossil fuels as they inhibit rather than improve the world's poorest countries' ability to develop; and
- Become a leader in climate policy once again by following the lead of other institutions that have restricted their fossil fuel financing, including ending support for oil and gas.

<sup>1.</sup> Federal Aviation Act Authorization of 2018, sec. 1411, BUILD Act of 2018, https://www.congress.gov/115/plaws/publ254/PLAW-115publ254.pdf.

<sup>2.</sup> Xioa Wu, et al., Harvard University, COVID-19 PM2.5: A national study on long-term exposure to air pollution and COVID-19 mortality in the United States (Apr. 2020), https://projects.ig.harvard.edu/covid-pm.

<sup>3.</sup> United Nations, UN Sustainable Development Goals Report, 2016. https://unstats.un.org/sdgs/report/2016/overview/

<sup>4.</sup> Patrick Bolton, et al., The Green Swan: Central Banking and Financial Stability in the Age of Climate Change (Jan. 2020), https://www.bis.org/publ/othp31.pdf.

<sup>5.</sup> Climate Policy Institute & Sustainable Energy for All, Energizing Finance: Understanding the Landscape 2019 (Oct. 2019), https://www.seforall.org/sites/default/files/2019-11/EF-2019-UL-SEforALL-w.pdf.

## **Methodology and Sources of Data**

This report analyzed data on the support that OPIC provided to energy projects from 2005 to 2019. The data reviewed includes OPIC support for exploration, development, extraction, and transportation of fossil fuels; power plant construction and operation; energy efficiency investments; and transmission and distribution of electricity. The project description on the DFC's (formerly OPIC's) All Active Projects web page, OPIC annual reports, or other OPIC/DFC project documents had to explicitly mention an energy source in order to be included in the analysis. Therefore, major infrastructure projects, such as the expansion of a port and improvement of a road, that may help facilitate an energy project were not included if they did not mention its connection to an energy source, even while they could add millions of dollars more to OPIC's indirect support for fossil fuels. In addition, this report does not include support provided through financial intermediaries unless the project description specifically mentioned an energy source.

The forms of energy in this report include:

- Fossil fuels = oil, gas, and coal
- Renewables = solar, wind, geothermal, and small hydro
- Other = infrastructure categorized as neither renewable nor fossil fuel-related, such as large hydro dams,<sup>6</sup> nuclear, biomass, or transmission infrastructure with no clearly identified energy source.

Data for this report comes from the DFC's (formerly OPIC's) All Active Projects web page and OPIC annual reports.<sup>7</sup> The All Active Projects web page and annual reports provide the year, project host country, and the amount of agency financing committed after the project has been approved. In addition, both provide a short project description, on which the author determined whether the project was an energy project to be included in this report. If the project description failed to provide sufficient detail despite being an energy-related project, the author searched through other project document pages, such as environmental and social impact assessments. If no documents could be found or insufficient detail provided, it was not included in the report's findings. Where discrepancies existed between the All Active Projects web page and the annual reports, the author confirmed with DFC staff as to when and which projected received OPIC support. Many projects, especially those from the earlier years reviewed, were no longer active projects, so they were only listed in the annual reports. All projects listed in the annual reports were included even if the project may have later not received the committed support in order to be consistent and demonstrate which projects had committed OPIC support.



<sup>6.</sup>Large hydro is not counted as renewable because dams required for the creation of power contribute to climate change by producing large quantities of methane and contributing to deforestation. International Rivers, Dirty Hydro: Dams and Greenhouse Gas Emissions (2008), <a href="https://www.internationalrivers.org/sites/default/files/attached-files/dirtyhydro\_factsheet\_lorez.pdf">https://www.internationalrivers.org/sites/default/files/attached-files/dirtyhydro\_factsheet\_lorez.pdf</a>; Bobby Magill, Hydropower May Be Huge Source of Methane Emissions, Climate Central, 29 Oct. 2014, <a href="https://www.climatecentral.org/news/hydropower-as-major-methane-emitter-18246">https://www.climatecentral.org/news/hydropower-as-major-methane-emitter-18246</a>; Gary Wock-ner, Dams Cause Climate Change, They Are Not Clean Energy, EcoWatch, 4 Apr. 2014, <a href="http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">https://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.https://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019">http://www.ecowatch.com/dams-cause-climate-change-they-are-not-clean-energy-1881943019</a>. <a href="http://www.ecowatch.com/dams-cause-cl

<sup>7.</sup> U.S. International Development Finance Corporation (DFC), All Active Projects, <u>https://www.dfc.gov/our-impact/all-active-projects</u> (last visited Feb. 4, 2020); DFC, Archived Reports: OPIC Annual Reports, <u>https://www.dfc.gov/media/reports/archived</u> (last visited Mar. 18, 2020).

## **OPIC's Energy Financing 2005 to 2019**

During the period from 2005 to 2019, OPIC experienced a dramatic increase in support for energy projects – both fossil fuels and renewables. From 2005 to 2009, OPIC almost exclusively supported fossil fuel and other non-renewable energy projects. Starting in 2011, OPIC's support for renewables skyrocketed while its support for fossils also climbed quickly in 2016.

#### From Nothing to Millions for Renewables, Including Distributed Renewables

Until 2010, OPIC provided negligible support for renewables projects. However, in the past 15 years, OPIC has committed over \$500 million on average per year to renewables. Over the past decade, OPIC provided \$7.6 billion to renewable projects with an annual average of over \$800 million. This represented a rapid ramp up of support during the Obama Administration that has continued through the Trump Administration, on average. This support included distributed renewables projects that are often the least expensive and quickest means of providing access to electricity to rural people in developing countries. For example, in 2019, OPIC invested \$10 million in FinLux ELLEN for off-grid solar kits and appliances in Chad. The DFC seems likely to continue strong support for renewables as evidenced by DFC CEO Adam Boehler's statement before Congress that he would prefer to do renewable deals.<sup>8</sup>

Some of these projects have been large (hundreds of megawatts) solar and wind farms, such as those in Kenya and Peru, but OPIC also found various means to invest in smaller projects. OPIC – and now DFC – supported financial intermediaries that take tens of millions of dollars in investment and disburse them to smaller projects. For example, OPIC invested in SunFunder, which provides loans for solar companies in 20 different countries, mainly in sub-Saharan Africa and South Asia.<sup>9</sup> This funding allows smaller companies working in off-grid, mini-grid, and residential solar to get the debt financing they need to get to scale. Additionally, the DFC invests in Lumos, a company selling solar home kits in Nigeria that can be paid for through small installments on the consumer's mobile phone.<sup>10</sup>

#### Figure 1. OPIC/DFC Support to the Energy Sector, 2005 to 2019



8. House Committee on Appropriations, Public Hearing, Export and Finance Agencies Budget Request for FY2021, Mar. 4, 2020, Time: 01:43:00, <a href="https://appropriations.house.gov/events/hearings/export-and-finance-agencies-budget-request-for-fy2021">https://appropriations.house.gov/events/hearings/export-and-finance-agencies-budget-request-for-fy2021</a>.

9. SunFunder, What We Do, https://www.sunfunder.com/what-we-do (last visited Feb. 6, 2020).

10. Lumos, What Is Lumos Mobile Electricity Service, https://www.lumos.com.ng/affordable-modern-solar-electricity-in-nigeria/ (last visited Feb. 6, 2020).

#### **Billions of Dollars for Oil and Gas**

From 2005 to 2019, OPIC's support increased not just for renewables, but also for fossil fuels with an especially large increase in the latter since 2015 and a dramatic increase in 2019. Over the past 15 years, OPIC provided an average of over \$357 million per year to fossil projects. Since President Trump came into office, there has been a spike in support for fossil fuels, although some of those projects were undoubtedly in the works during the last years of President Obama's administration. For the most part, this support is comprised of hundreds of millions of dollars for a few massive oil and gas projects. For example, in 2019, OPIC invested \$450 million to develop oil and gas resources off the coast of Oman - a high income country. While OPIC did not support any fossil fuel projects in 2018, this aberration is most likely due to the fiscal year when projects in the pipeline were approved, rather than a major shift away from fossil fuels; this is supported by the huge jump in fossil fuel support in 2019. It is important to note though that in the transactions analyzed, OPIC did not support a single coal project.

One of the most recent project examples is in 2019 when OPIC approved \$450 million in support for the enterprises Vista Oil & Gas Argentina S.A. and Aleph

### Figure 2. Percentage of OPIC/DFC's Total Support in the Energy Sector, 2005 to 2019



Midstream S.A. to drill and complete production of 110 wells to develop non-conventional oil and gas from the Vaca Muerta shale basin, as well as midstream facilities to gather, process, and transport production from Bajada de Palo Oeste and Entre Lomas. Argentina's oil and gas development in Vaca Muerta, one of the largest deposits of shale oil and gas in the world, is polluting the environment, trampling on the rights of the Indigenous Peoples of the Neuquén province,<sup>11</sup> and impacting their health, water, housing, and cultural rights - without effective consultation or obtaining their free, prior, and informed consent to the development.<sup>12</sup> According to the Environmental and Social Impact Assessment (ESIA) OPIC provided for the project, major impacts include the potential for accidental releases of oil and natural gas, which could adversely impact the safety of both drilling and plant personnel and the communities during product transport. Financing this project was a negative asterisk on OPIC's reputation in its final days as a financier of sustainable development and the wrong note with which to close out the decades-old agency.

# for the Aleph Total 0 2019

11. Fundación Ambiente y Recursos Naturales (FARN), the Center for International Environmental Law (CIEL), and Friends of the Earth U.S. (FOE), Public Comments on Environmental and Social Impact Assessment (ESIA) for Bajada de Polo Oeste and Vista Midstream Capex Project Application, Aug. 26, 2019, <a href="https://pages.devex.com/rs/685-KBL-765/images/2019.8.26-com-ments-re-ESIA-Vista-Oil-Gas-Aleph-Midstream">https://pages.devex.com/rs/685-KBL-765/images/2019.8.26-com-ments-re-ESIA-Vista-Oil-Gas-Aleph-Midstream FARN-CIEL-FOE.pdf</a>.

12. Uki Goñi, Indigenous Mapuche pay high price for Argentina's fracking dream, The Guardian, Oct. 14, 2019, <a href="https://www.theguardian.com/environment/2019/oct/14/indigenous-mapu-che-argentina-fracking-communities">https://www.theguardian.com/environment/2019/oct/14/indigenous-mapu-che-argentina-fracking-communities</a>.

#### Support Mainly for Wealthier Countries/ Larger Economies

The largest recipients of support from 2005 to 2019 – both in terms of total dollar amount in support and total number of deals – skewed toward countries that are wealthier and/or larger economies. For instance, India – the world's fifth largest economy – has the greatest number of deals and the third largest amount of support from OPIC. Chile, which has received the most support from OPIC, is classified as a high-income country.<sup>13</sup> OPIC has also provided much needed, albeit relatively insufficient support to countries with a great need and lower income levels, such as Senegal.

The DFC, which mandate includes a focus on less developed countries, can learn from the U.S. African Development Foundation (USADF), a small, independent agency that provides seed capital and technical support to African-led businesses.<sup>14</sup> The USADF's small (up to \$250,000) grants helps communities at the bottom of the development pyramid. USADF has invested in 75 off-grid energy projects to rural communities in nine different countries. DFC and USADF serve different purposes, but the USADF demonstrates that there are many opportunities to invest in energy projects that will improve access to clean and affordable electricity in some of the world's poorest countries.



- 13. The World Bank Group, Data Chile, <u>https://data.worldbank.org/country/chile</u> (last visited Mar. 19, 2020).
- 14. U.S. African Development Foundation, https://www.usadf.gov/off-grid (last visited Feb. 6, 2020).

## Figure 3. Map to show recipient countries with bubble size depending on amount of support received from OPIC



## Figure 4. Top 10 countries receiving the most cumulative support from 2005 to 2019

| Country      | Total support    |  |  |  |  |  |
|--------------|------------------|--|--|--|--|--|
| Chile        | \$ 1,186,400,000 |  |  |  |  |  |
| Ukraine      | \$ 1,062,950,000 |  |  |  |  |  |
| India        | \$ 897,644,524   |  |  |  |  |  |
| South Africa | \$ 831,075,000   |  |  |  |  |  |
| Israel       | \$ 820,000,000   |  |  |  |  |  |
| Egypt        | \$ 788,900,000   |  |  |  |  |  |
| Kenya        | \$ 777,820,485   |  |  |  |  |  |
| Argentina    | \$ 738,100,000   |  |  |  |  |  |
| Jordan       | \$ 727,370,368   |  |  |  |  |  |
| Pakistan     | \$ 654,900,000   |  |  |  |  |  |

# Figure 5. Countries with the greatest number of OPIC/DFC-supported projects from 2005 to 2019

| Country  | Number of Deals |
|----------|-----------------|
| India    | 24              |
| Colombia | 10              |
| Jordan   | 10              |
| Jamaica  | 9               |
| Nigeria  | 9               |
| Chile    | 8               |
| Senegal  | 8               |
| Ukraine  | 8               |
| Mexico   | 7               |
| Kenya    | 7               |
| Pakistan | 7               |

### **Recommendations for DFC**

OPIC has evolved mightily in the last 15 years when it comes to investment in the energy sector. OPIC went from almost exclusively supporting fossil fuels to providing an average of half a billion dollars a year to renewables. OPIC significantly increased support for renewables between 2010 and 2015, while fossil fuels experienced a boom in OPIC support from 2015 onward, and especially in 2019. Based on the analysis of OPIC's energy support since 2005, Friends of the Earth U.S. recommends the following:

## Increase support for renewables, especially distributed renewables

The aim of the DFC is to reduce poverty and aid sustainable economic development in the world's poorest countries. The best way to do that in the energy sector is to support projects that will not pollute local air and water or infringe upon the rights of local communities.<sup>15</sup> Renewables, especially smaller-scale renewables, are best able to provide energy access that is clean and less expensive than fossil fuels.<sup>16</sup> The DFC should, therefore, not only continue, but increase its support for renewable projects, particularly smaller scale renewables.

The poorest countries in the world have low levels of access to electricity and little energy infrastructure. These countries can, therefore, leapfrog over fossil fuels in order to develop sustainably in ways that do not pollute the air and water of local communities and wreak havoc on the climate. DFIs play a critical role in investing in smaller companies that private banks consider too risky.<sup>17</sup> OPIC made progress by financing companies like SunFunder and Lumos, and the DFC should increase its support to similar institutions and other nontraditional financing mechanisms. Further,

as the DFC considers how it can best help those in low and lower middle-income countries, it can learn from the success of and work with USADF to improve its support for off-grid projects.

#### End all support for fossil fuels

OPIC, and now DFC as its successor, has committed billions of dollars to oil and gas projects that harm local communities and exacerbate climate change. Natural gas, especially when it is liquefied and transported around the globe, can be as bad or worse for the climate than coal.<sup>18</sup> These projects include investments in fracking, which poisons local water systems and causes earthquakes, among other impacts.<sup>19</sup> The burning of fossil fuels is one of the leading causes of climate change, which disproportionately impacts people in developing countries. The impacts of climate change include more severe flooding – like those that occurred in Mozambique in 2018 – and longer, more intense droughts like those that have recently been experienced in southern Africa. The DFC aims to improve the economic development of less developed countries, but supporting fossil fuel projects directly undermines that goal. The DFC should heed the warnings of the UN, members of the Network of Central Banks and Supervisors,<sup>20</sup> and other institutions by making mitigating climate change front and center to its portfolio decisions.

At the time of the writing of this brief, the DFC is currently considering support for a coal plant in Kosovo – an upper middle income country. If the DFC approves this project, it will be a huge step backward for the agency and the wrong direction for the new institution to go. The new Kosovo coal plant would reap negative development and macroeconomic impacts on ratepayers, the country and Government of Kosovo,



<sup>15.</sup> Jos Lelieveld, et al., Loss of life expectancy from air pollution compared to other risk factors: a worldwide perspective, Cardiovascular Research (Mar. 3, 2020), <a href="https://academic.oup.com/cardiovascres/advance-article/doi/10.1093/cvr/cvaa025/5770885">https://academic.oup.com/cardiovascres/advance-article/doi/10.1093/cvr/cvaa025/5770885</a>; Lucy Allen, et al., Fossil Fuels and Water Quality, in "The World's Water Volume 7" (2011), <a href="https://academic.oup.com/tent/uploads/2013/07/chapter\_4">https://academic.oup.com/cardiovascres/advance-article/doi/10.1093/cvr/cvaa025/5770885</a>; Lucy Allen, et al., Fossil Fuels and Water Quality, in "The World's Water Volume 7" (2011), <a href="https://academic.oup.com/tent/uploads/2013/07/chapter\_4">https://academic.oup.com/tent/uploads/2013/07/chapter\_4</a> fossil fuel and water quality.pdf.

<sup>16.</sup> REN21, Chapter 4: Distributed Renewables for Energy Access, in "Renewables 2019: Global Access Report," (May 2019), <a href="https://www.ren21.net/gsr-2019/chapters/chapter\_04/chapter\_04/">https://www.ren21.net/gsr-2019/chapters/chapter\_04/chapter\_04/</a>.

<sup>17.</sup> Samantha Attridge, Dirk Willem te Velde and Søren Peter Andreasen, Impact of development finance institutions on sustainable development (Sept. 2019), <a href="https://www.odi.org/sites/odi.org.uk/files/resource-documents/12892.pdf">https://www.odi.org/sites/odi.o

Robert W. Howarth, A Bridge to Nowhere: Methane Emissions and the Greenhouse Gas Footprint of Natural Gas, ENERGY SCI. & ENG'G (2014), <u>http://www.eeb.cornell.edu/howarth/publications/Howarth 2014 ESE methane emissions.pdf</u>.
E.g., Ellsworth, William L. "Injection-induced earthquakes." Science Vol. 341, No. 6142. July 12, 2013; <u>https://science.sciencemag.org/content/341/6142/1225942</u>; K. M. Keranen et

<sup>19.</sup> E.g., Ellsworth, William L. "Injection-induced earthquakes." Science Vol. 341, No. 6142. July 12, 2013; https://science.sciencemag.org/content/341/6142/1225942; K. M. Keranen et al., Sharp increase in central Oklahoma seismicity since 2008 induced by massive wastewater injection, Science Vol. 345, No. 6195, July 25, 2014, https://science.sciencemag.org/content/345/6195/448; Coral Davenport, Reversing Course, E.P.A. Says Fracking Can Contaminate Drinking Water, N.Y. Times, Dec. 13, 2016, https://www.nytimes.com/2016/12/13/us/revers-ing-course-epa-says-fracking-can-contaminate-drinking-water.html.

<sup>20.</sup> Network for Greening the Financial System, A Call for Action: Climate Change as a Source of Financial Risk (Apr. 2019), https://www.banque-france.fr/sites/default/files/media/2019/04/17/ngfs\_first\_comprehensive\_report\_\_\_17042019\_0.pdf.

even as more affordable and cleaner alternatives are available to meet Kosovo's energy needs.<sup>21</sup> Friends of the Earth U.S. strongly recommends that the DFC reject investment in the Kosovo coal plant and any other coal projects that might apply for DFC support in the future.

While OPIC has not directly supported a coal project in at least a decade, it provided billions of dollars for oil and gas projects all over the world. These projects include the extraction of oil and gas, fossil fuel infrastructure such as ports, oil and gas pipelines, and fracking wells. These projects will worsen the world's dependence on fossil fuels for decades to come, making it nearly impossible to keep warming to levels that are within internationally agreed upon limits. These projects also pollute the air and water, putting people's health at greater risks to COVID-19 and other diseases. Moreover, many of these projects are in upper middle income and upper income countries, meaning that the only impact the world's poorest communities receive from these investments is the worsened effects of climate change. Therefore, Friends of the Earth strongly recommends that the DFC reject any proposals for support for all oil and gas projects.

#### **Become a Leader in Climate Policy Again**

In 2009, Congress mandated OPIC to develop a climate policy intended to cap and phase down the agency's fossil fuel financing, as well as to scale up renewable energy financing. This Congressional mandate followed a 2002 lawsuit against OPIC and the U.S. Export Import Bank filed by Friends of the Earth U.S., Greenpeace, and the cities of Boulder in Colorado and Arcata, Santa Monica, and Oakland in California.<sup>22</sup> At the time of its enactment, the OPIC climate policy was the first of its kind among DFIs world-wide. However, public finance institutions have since increased their understanding of the severity of climate change and the OPIC (now DFC) climate policy is no longer first in class.

The DFC must now take this opportunity to improve its policies, so that they evolve and match the latest climate science and leading finance institution climate policies. Since the establishment of OPIC's climate policy, many other DFIs and finance institutions around the world have enacted policies that are more advanced. In the past five years, several institutions took steps to move away from coal, but more recently institutions have been specifically addressing financing for oil and gas projects. For example, the European Investment Bank, the lending arm of the European Union, has issued a policy that will end its support for virtually all oil, gas, and coal by the end of 2021.<sup>23</sup> In addition, the World Bank will no longer finance upstream oil and gas projects except in the poorest countries under certain circumstances.<sup>24</sup> Export credit agencies, which do not have a development mandate, are also increasingly enacting policies that restrict their support for oil and gas. For example, In December 2019, France adopted a new law that officially banned export credits for coal, shale oil and gas, and routine flaring.<sup>25</sup>

This change in policy should not include allowing nuclear, which DFC's policy currently prohibits it from supporting.<sup>26</sup> Small modular reactors (SMRs) are not economically competitive for electric power generation, and those economics are unlikely to change anytime soon, meaning that SMRs cannot contribute in a meaningful way to greenhouse gas mitigation for at least the next three decades.<sup>27</sup> Additionally, DFC's support of nuclear would divert funds from other energy projects needed to improve access to electricity in the countries that DFC is supposed to focus on. Moreover, this policy change would put DFC out of step with most DFIs, which do not allow support for nuclear power projects.

<sup>21.</sup> Jeta Xharra, et al., Kosovo Civil Society Consortium for Sustainable Development, Letter to David Bohigian, et al., Acting President and CEO, Overseas Private Investment Corporation, *OPIC Policy Violations Regarding the Kosova e Re Power Plant*, June 18, 2019 (on file with author). "Households in Kosovo already pay a very high percentage of their income for energy services, and this project would drive up the overall price of electricity in Kosovo by at least a third and as much as 50 percent. This would put enormous additional strain on household finances, particularly for those with low and very low-incomes. Moreover, the project would impose additional economic risks on the Government and people of Kosovo, as the PPA requires the Government to assume all of the project risks." Jeta Xharra, et al., Kosovo Civil Society Consortium for Sustainable Development, Letter to David Bohigian, et al., Acting President and CEO, Overseas Private Investment Corporation, *Update on Kosovo's Classification as an 'Upper Middle Income Country' and its Impact on the Eligibility of the Kosova e Re Power Place for DFC Support*, Aug. 1, 2019 (on file with author).

<sup>22.</sup> The lawsuit resulted in a 2009 settlement agreement requiring OPIC to commit to reducing GHG emissions associated with its supported projects by 20 percent over the subsequent ten years, while increasing financing for renewable energy. Later that year, a Congressional statute required OPIC to further reduce its fossil fuel financing by 30 percent in ten years and 50 percent in 15 years.

<sup>23.</sup> European Investment Bank (EIB), EIB Energy Lending Policy: Supporting the Energy Transformation (Nov. 2019), <a href="https://www.eib.org/attachments/strategies/eib\_energy\_lending\_policy">https://www.eib.org/attachments/strategies/eib\_energy\_lending\_policy</a> cy en.pdf.

<sup>24.</sup> Michel Rose & Ingrid Melander, World Bank to Cease Financing Upstream Oil and Gas after 2019, REUTERS, 12 Dec. 2017, <a href="https://www.reuters.com/article/us-climatechange-sum-mit-worldbank-idUSKBN1E61LE">https://www.reuters.com/article/us-climatechange-sum-mit-worldbank-idUSKBN1E61LE</a>; World Bank, Press Release, World Bank Group Announcements at One Planet Summit, 12 Dec. 2017, <a href="https://www.worldbank.org/en/news/press-re-lease/2017/12/12/world-bank-group-announcements-at-one-planet-summit">https://www.worldbank.org/en/news/press-re-lease/2017/12/12/world-bank-group-announcements-at-one-planet-summit</a>.

<sup>25.</sup> Government of France, Report of the Government to the Parliament on the Ways of Modulating Public Guarantees for Foreign Trade, 5 Nov. 2019, <u>https://www.economie.gouv.fr/</u> rapport-du-gouvernement-au-parlement-sur-les-pistes-de-modulation-des-garanties-publiques; Republic of France, LAW n ° 2019-1479 of December 28, 2019 of Finance for 2020 (1), art. 201, https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000039683923&dateTexte=&categorieLien=id#JORFART1000039684001.

<sup>26.</sup> DFC, Environmental and Social Policy and Procedures, Appendix B (Jan. 2020), <a href="https://www.dfc.gov/sites/default/files/media/documents/DFC\_ESPP\_012020.pdf">https://www.dfc.gov/sites/default/files/media/documents/DFC\_ESPP\_012020.pdf</a>.

<sup>27.</sup> Morgan, M. Granger, Ahmed Abdulla, Michael J. Ford, and Michael Ratha. "US nuclear power: The vanishing low-carbon wedge." Proceedings of the National Academy of Sciences of the United States of America. 115 (28) 7184-7189. July 10,

#### Conclusion



As the DFC moves ahead with its first year in full operation, it must consider the direction it should take with its investments in the energy sector. The COVID-19 crisis has made this decision even more urgent with an even greater need to choose projects that do not spread the virus through workforces and communities, exacerbate air pollution or infringe upon animal habitats. The previous decade saw OPIC's investment in renewables go from near zero to billions of dollars. The DFC should continue this trend with a concerted effort to focus on distributed renewables – mini- and off-grid projects, especially in sub-Saharan Africa where the need for access to electricity is incredibly great. Unfortunately, OPIC also provided billions of dollars for massive oil and gas projects that will continue the world's dependence on fossil fuels while polluting local communities—much to the detriment of developing countries that the DFC is supposed to support. The DFC should follow the cue of other institutions that have leapfrogged the DFC in terms of ending their support for fossil fuels.

. . . . . . . . .

#### **Annex I. Complete List of OPIC/DFC Energy Projects**

| Year | Project   | Country     | Am             | ount        | Energy      |
|------|---|-------------|----------------|-------------|-------------|
| 2005 | Israel Electric Corp.                             | Israel      | \$ 320,000,000 |             | Fossil fuel |
| 2005 | PT Tucan Pumpco Services                          | Indonesia   | \$ 4,500,000   |             | Fossil fuel |
| 2005 | West Africa Gas Pipeline<br>Company               | Benin       | \$ 2,          | ,500,000    | Fossil fuel |
| 2005 | West Africa Gas Pipeline<br>Company               | Тодо        | \$ 2,          | ,500,000    | Fossil fuel |
| 2005 | West Africa Gas Pipeline<br>Company               | Ghana       | \$45           | 5,000,000   | Fossil fuel |
| 2005 | Baku Oil Tools                                    | Azerbaijan  | \$             | 540,000     | Fossil fuel |
| 2005 | Akbank T.A.S.                                     | Turkey      | \$             | 30,000,000  | Fossil fuel |
| 2005 | Tyra Block  | Nicaragua   | \$             | 3,778,084   | Fossil fuel |
| 2005 | Perlas Block                                      | Nicaragua   | \$             | 2,806,887   | Fossil fuel |
| 2005 | Triangle General Contrac-<br>tors, In             | Kosovo      | \$             | 5,500,000   | Other       |
| 2005 | Khozner HPP                                       | Kosovo      | \$             | 1,000,000   | Other       |
| 2005 | Hidroelectrica Rio Hondo<br>S.A.                  | Guatemala   | \$             | 41,600,000  | Other       |
| 2005 | Isagen  | Colombia    | \$             | 310,000,000 | Other       |
| 2006 | PT Tucan Pumpco Services<br>Indonesia             | Indonesia   | \$             | 1,906,501   | Fossil      |
| 2006 | Bhote Koshi Private Compa-<br>ny                  | Nepal       | \$             | 18,562,500  | Other       |
| 2007 | Southern Energy Partners                          | India       | \$             | 721,035     | Renewable   |
| 2007 | Southern Energy Partners                          | India       | \$             | 1,150,000   | Renewable   |
| 2007 | AES Jordan  | Jordan      | \$             | 70,000,000  | Fossil fuel |
| 2007 | Apache  | Egypt       | \$             | 200,000,000 | Fossil fuel |
| 2007 | ContourGlobal T                                   | Тодо        | \$             | 23,924,060  |             |
| 2007 | Ukraine Methane Partners                          | Ukraine     | \$             | 9,950,000   | Fossil fuel |
| 2007 | Math Hydro Power                                  | Sri Lanka   | \$             | 4,306,000   | Renewable   |
| 2007 | DV Technologies                                   | Serbia      | \$             | 153,000     | Other       |
| 2007 | DV Technologies                                   | Serbia      | \$             | 153,000     | Other       |
| 2007 | Energia Escalona                                  | Mexico      | \$             | 12,675,000  | Renewable   |
| 2008 | Caspian Services                                  | Kazakhstan  |                |             | Fossil fuel |
| 2008 | Ma TH Hydro Power                                 | Sri Lanka   | \$             | 1,402,922   | Renewable   |
| 2009 | Sustainable Energy Services<br>Afghanistan        | Afghanistan | \$             | 2,000,000   | Renewable   |
| 2009 | Azure Power                                       | India       | \$             | 6,230,000   | Renewable   |
| 2009 | Asia Development Partners -<br>Orient Green Power | India       |                |             | Renewable   |
| 2009 | ContourGlobal Togo S.A.                           | Тодо        | \$             | 146,250,000 | Fossil fuel |
| 2009 | ContourGlobal Togo S.A.                           | Тодо        | \$             | 17,500,000  | Fossil fuel |

| 2009 | Parko Services   | Colombia                  | \$ | 2,800,000   | Fossil fuel |
|------|--|---------------------------|----|-------------|-------------|
| 2009 | Joshi Technologies   | Colombia                  | \$ | 8,000,000   | Fossil fuel |
| 2009 | Alsis Latin America Fund   | Mexico                    |    |             | Fossil fuel |
| 2009 | ContourGlobal  | Nigeria                   | \$ | 5,850,000   | Other       |
| 2009 | Husk Power Services  | India                     | \$ | 750,000     | Other       |
| 2009 | Buchanan Renewables  | Liberia                   | \$ | 111,700,000 | Other       |
| 2010 | Azure Power  | India                     | \$ | 7,700,000   | Renewable   |
| 2010 | Azure Power  | India                     | \$ | 26,835,436  | Renewable   |
| 2010 | SEP Energy India   | India                     | \$ | 800,000     | Renewable   |
| 2010 | SEP Energy India   | India                     | \$ | 1,000,000   | Renewable   |
| 2010 | SEP Energy India   | India                     | \$ | 150,000     | Renewable   |
| 2010 | International Home Finance<br>& Development                          | Afghanistan               | \$ | 595,165     | Renewable   |
| 2010 | International Home Finance<br>& Development                          | Afghanistan               | \$ | 7,000,000   | Renewable   |
| 2010 | South Asia Clean Energy<br>Fund                                      | Asia regional             | \$ | 100,000,000 |             |
| 2010 | ContourGlobal  | Nigeria                   | \$ | 8,559,000   | Fossil fuel |
| 2010 | ContourGlobal  | Nigeria                   | \$ | 8,082,000   | Fossil fuel |
| 2010 | ContourGlobal  | Nigeria                   | \$ | 21,195,000  | Fossil fuel |
| 2010 | ContourGlobal  | Worldwide                 | \$ | 250,000,000 | Fossil fuel |
| 2010 | Latin Power III, L.P.Impulsora<br>de Proyectos Hidroelectri-<br>cos, | Mexico                    |    |             | Other       |
| 2010 | Grupo Jaremar  | Honduras                  | \$ | 15,000,000  | Other       |
| 2011 | AST Telecom Solar Private<br>Limited                                 | India                     | \$ | 150,000,000 | Renewable   |
| 2011 | AZURE POWER (GUJARAT)<br>PVT LTD - SUNEDISON                         | India                     | \$ | 14,700,000  | Renewable   |
| 2011 | ESP Urja Private Limited   | India                     | \$ | 14,800,000  | Renewable   |
| 2011 | GTS Majes SAC and GTS<br>Reparticion SAC                             | Peru                      | \$ | 123,000,000 | Renewable   |
| 2011 | Azure Power Gujarat Private<br>Limited                               | India                     | \$ | 4,399,138   | Renewable   |
| 2011 | Azure Power  | India                     | \$ | 13,210,600  | Renewable   |
| 2011 | Solaria  | India                     | \$ | 30,000,000  | Renewable   |
| 2011 | Fujeij Wind  | Jordan                    | \$ | 225,000     | Renewable   |
| 2011 | Intl. Co. for Energy Technolo-<br>gy Industries                      | Jordan                    | \$ | 3,000,000   | Renewable   |
| 2011 | SunEdison Thailand   | Thailand                  | \$ | 250,000,000 | Renewable   |
| 2011 | North Star St. Kitts   | St Christo-<br>pher-Nevis | \$ | 16,040,000  | Renewable   |
| 2011 | ContourGlobal  | Ukraine                   | \$ | 25,000,000  | Fossil fuel |
| 2011 | Joshi Technologies   | Colombia                  | \$ | 18,000,000  | Fossil fuel |
| 2011 | Parko Services   | Colombia                  | Ś  | 6,400,000   | Fossil fuel |

12 | A Surge in Support: A Review of 15 years of OPIC's Energy Financing

| 2011 | Orpower 4 Geothermal                           | Kenya        | \$    | 310,000,000 | Renewable   |
|------|--|--------------|-------|-------------|-------------|
| 2011 | Buchanan Renewables                            | Liberia      | \$    | 90,000,000  | Other       |
| 2011 | Mtkvari HPP                                    | Georgia      | \$    | 58,000,000  | Other       |
| 2011 | Air Drilling Associates                        | Worldwide    | \$    | 10,000,000  | Renewable   |
| 2012 | Tacna Solar S.A.C. and Pana-<br>mericana Solar | Peru         | \$    | 185,000,000 | Renewable   |
| 2012 | AKBANK T.A.S.                                  | Turkey       | \$    | 250,000,000 | Renewable   |
| 2012 | ZBE PARTNERS EAD                               | Bulgaria     | \$    | 50,000,000  | Renewable   |
| 2012 | ESP Urja Private Limited                       | India        | \$    | 4,342,315   | Renewable   |
| 2012 | SEP Energy India Pvt Ltd                       | India        | \$    | 1,935,000   | Renewable   |
| 2012 | SunEdison - Firefly Invest-<br>ments           | South Africa | \$    | 250,000,000 | Renewable   |
| 2012 | Sustainable Energy Services<br>Afghanistan     | Afghanistan  | \$    | 3,000,000   | Renewable   |
| 2012 | IDFC   | India        | \$    | 250,000,000 | Renewable   |
| 2012 | AIC Caribbean Fund                             | Domincan Re  | oubli | с           | Renewable   |
| 2012 | Latin Power Trust III                          | Mexico       |       |             | Renewable   |
| 2012 | AES Levant                                     | Jordan       | \$    | 270,000,000 | Fossil fuel |
| 2012 | SSJD BioEnergy                                 | Pakiston     | \$    | 16,700,000  | Other       |
| 2013 | AMANECER                                       | Chile        | \$    | 147,500,000 | Renewable   |
| 2013 | Firefly Investments                            | South Africa | \$    | 250,000,000 | Renewable   |
| 2013 | Jhimpir Power                                  | Pakistan     | \$    | 101,500,000 | Renewable   |
| 2013 | Sapphire Wind                                  | Pakistan     | \$    | 95,000,000  | Renewable   |
| 2013 | San Andres                                     | Chile        | \$    | 105,000,000 | Renewable   |
| 2013 | PV Salvador                                    | Chile        | \$    | 155,000,000 | Renewable   |
| 2013 | Humboldt Current                               | Peru         | \$    | 192,755,250 | Renewable   |
| 2013 | KMR Infrastucture                              | Tanzania     | \$    | 13,350,000  | Renewable   |
| 2013 | NextGen Solawazi                               | Tanzania     | \$    | 9,740,000   | Renewable   |
| 2013 | Melowind                                       | Uruguay      | \$    | 96,000,000  | Renewable   |
| 2013 | AES Levant                                     | Jordan       | \$    | 48,600,000  | Fossil fuel |
| 2013 | Joshi Technologies                             | Colombia     | \$    | 14,500,000  | Fossil fuel |
| 2013 | Parko Services                                 | Colombia     | \$    | 4,500,000   | Fossil fuel |
| 2013 | Alto Maipo                                     | Chile        | \$    | 250,000,000 | Other       |
| 2014 | Firefly  | South Africa | \$    | 34,000,000  | Renewable   |
| 2014 | Mekong Renewable Resourc-<br>es Fund           | Vietnam      | \$    | 50,000,000  | Renewable   |
| 2014 | CSI Leasing                                    | Aruba        | \$    | 10,000,000  | Renewable   |
| 2014 | Adwa' Ma'an Al Oula Lil Tak<br>PSC             | Jordan       | \$    | 25,000,000  | Renewable   |
| 2014 | Azure Sunlight                                 | India        | \$    | 20,000,000  | Renewable   |
| 2014 | Blue Mountain Renewables<br>Wind Power         | Jamaica      | \$    | 43,000,000  | Renewable   |
| 2014 | WRB Enterprises                                | Jamaica      | \$    | 585,072     | Renewable   |
| 2014 | CGLOB-TSKB                                     | Turkey       | \$    | 30,000,000  | Renewable   |

| 2014 | Generacion Solar                              | Chile                | \$<br>48,900,000  | Renewable   |
|------|---|----------------------|-------------------|-------------|
| 2014 | Hawa Energy                                   | Pakistan             | \$<br>97,700,000  | Renewable   |
| 2014 | Master Wind Energy                            | Pakistan             | \$<br>50,000,000  | Renewable   |
| 2014 | Moquegua FV S.A.C.                            | Peru                 | \$<br>41,500,000  | Renewable   |
| 2014 | Negev Energy - Ashalim<br>Thermo-Solar        | Israel               | \$<br>250,000,000 | Renewable   |
| 2014 | Parque Solar Fotovoltaico<br>Luz Del Norte    | Chile                | \$<br>230,000,000 | Renewable   |
| 2014 | SIMPA Networks                                | India                | \$<br>3,000,000   | Renewable   |
| 2014 | Lake Turkana Wind Power                       | Kenya                | \$<br>46,000,000  | Renewable   |
| 2014 | Tres Mesas                                    | Mexico               | \$<br>160,000,000 | Renewable   |
| 2014 | Tres Mesas                                    | Mexico               | \$<br>90,000,000  | Renewable   |
| 2014 | Azura-Edo                                     | Nigeria              | \$<br>23,407,359  | Fossil fuel |
| 2014 | Azura-Edo                                     | Nigeria              | \$<br>35,000,000  | Fossil fuel |
| 2014 | Alto Maipo                                    | Chile                | \$<br>245,000,000 | Other       |
| 2014 | Africa Finance Corporation                    | Africa re-<br>gional | \$<br>75,000,000  | Other       |
| 2014 | Los Molinos                                   | Colombia             | \$<br>50,000,000  | Other       |
| 2014 | Jamaica public serrvice<br>company            | Jamaica              | \$<br>22,500,000  | Other       |
| 2015 | Provindia Energetika                          | Hungary              | \$<br>1,500,000   | Renewable   |
| 2015 | Sun Edison                                    | Jordan               | \$<br>15,462,525  | Renewable   |
| 2015 | ACWA Power Solar Reserve                      | South Africa         | \$<br>250,000,000 | Renewable   |
| 2015 | Jamaica Wind                                  | Jamaica              | \$<br>34,000,000  | Renewable   |
| 2015 | Content Solar Limited                         | Jamaica              | \$<br>47,500,000  | Renewable   |
| 2015 | GoSolar Energy Efficiency<br>S.R.L.           | Costa Rica           | \$<br>6,500,000   | Renewable   |
| 2015 | Greenlight Planet,                            | Multiple             | \$<br>5,000,000   | Renewable   |
| 2015 | Kipeto Wind Power Project                     | Kenya                | \$<br>232,560,000 | Renewable   |
| 2015 | Lake Turkana                                  | Kenya                | \$<br>127,928,000 | Renewable   |
| 2015 | Cloverfield Energy                            | Kenya                | \$<br>6,832,485   | Renewable   |
| 2015 | Los Santos Solar                              | Mexico               | \$<br>15,500,000  | Renewable   |
| 2015 | Solar Azuero Venture, S.R.L.                  | Panama               | \$<br>15,500,000  | Renewable   |
| 2015 | Solar Cocle Venture, S.R.L.                   | Panama               | \$<br>15,500,000  | Renewable   |
| 2015 | Solar Panama Venture, S.R.L.                  | Panama               | \$<br>14,500,000  | Renewable   |
| 2015 | Txtlight Power Solutions Lim-<br>ited (Lumos) | Nigeria              | \$<br>15,000,000  | Renewable   |
| 2015 | Content Solar Limited                         | Jamaica              | \$<br>9,750,000   | Renewable   |
| 2015 | Content Solar Limited                         | Jamaica              | \$<br>14,250,000  | Renewable   |
| 2015 | Tenaga Wind Power Project                     | Pakistan             | \$<br>44,000,000  | Renewable   |
| 2015 | Amandi Energy Limited                         | Ghana                | \$<br>250,000,000 | Fossil fuel |
| 2015 | ContourGlobal Cap des<br>Biches               | Senegal              | \$<br>100,000,000 | Fossil fuel |

| 2015 | Standard Bank of South<br>Africa Limited  | Africa                      | \$<br>250,000,000 | Other       |
|------|---|-----------------------------|-------------------|-------------|
| 2015 | k-Electric  | Pakistan                    | \$<br>250,000,000 | Other       |
| 2016 | Taiba Ndiaye  | Senegal                     | \$<br>244,100,000 | Renewable   |
| 2016 | Meridiam Senergy 30 MW<br>Solar   | Senegal                     | \$<br>2,025,000   | Renewable   |
| 2016 | SunFunder   | Multiple                    | \$<br>15,000,000  | Renewable   |
| 2016 | Sidrap Project  | Indonesia                   | \$<br>120,000,000 | Renewable   |
| 2016 | Butama Hydro Electricity<br>Company   | Uganda                      | \$<br>13,650,000  | Renewable   |
| 2016 | ReNew Wind Energy(TN 2)<br>Private Limited - Telangan   | India                       | \$<br>74,021,000  | Renewable   |
| 2016 | Txtlight Power Solutions Lim-<br>ited II  | Nigeria                     | \$<br>35,000,000  | Renewable   |
| 2016 | Acu Petroleo S.A.   | Brazil                      | \$<br>350,000,000 | Fossil fuel |
| 2016 | ContourGlobal Cap des Bich-<br>es Senegal   | Senegal                     | \$<br>53,000,000  | Fossil fuel |
| 2016 | Contourglobal Cap des Bich-<br>es Senegal (reported in 2016<br>annual report, disbursed in<br>2018) | Senegal                     | \$<br>33,601,050  | Fossil fuel |
| 2016 | APACHE CORPORATION  | Egypt                       | \$<br>50,000,000  | Fossil fuel |
| 2016 | Various Apache Egypt con-<br>cession subsidiaries   | Egypt                       | \$<br>25,000,000  | Fossil fuel |
| 2016 | Azura Power West Africa Ltd   | Nigeria                     | \$<br>20,000,000  | Fossil fuel |
| 2016 | Talbott Underwriting  | South Africa                | \$<br>7,075,000   | Other       |
| 2016 | South Asia Clean Energy Fund  |                             | \$<br>18,000,000  | Other       |
| 2017 | Orb Energy  | India                       | \$<br>10,000,000  | Renewable   |
| 2017 | Ten Merina Ndakhar SUARL  | Senegal                     | \$<br>2,960,000   | Renewable   |
| 2017 | Bosforo, Ltda. de C.V.  | El Salvador                 | \$<br>49,500,000  | Renewable   |
| 2017 | ReNew Wind Energy (TN 2)<br>Private Limited - Karnataka   | India                       | \$<br>36,900,000  | Renewable   |
| 2017 | Bangweulu Power Company<br>Limited  | Zambia                      | \$<br>19,900,000  | Renewable   |
| 2017 | WRB Serra Partners Fund I   | Latin Ameri-<br>ca Regional | \$<br>33,300,000  | Renewable   |
| 2017 | Ndugutu Power Company<br>Uganda Limited   | Uganda                      | \$<br>12,390,000  | Renewable   |
| 2017 | Proyecto La Trinidad, Ltda.<br>de C.V.  | El Salvador                 | \$<br>50,000,000  | Renewable   |
| 2017 | Acajutla and Sonsonate Sola   | El Salvador                 | \$<br>46,500,000  | Renewable   |
| 2017 | BMR Jamaica Wind Limited  | Jamaica                     | \$<br>29,250,000  | Renewable   |
| 2017 | AM Solar B.V./Jordan  | Jordan                      | \$<br>40,000,000  | Renewable   |
| 2017 | Geotermica Platanares, S.A.<br>de C.V.  | Honduras                    | \$<br>135,000,000 | Renewable   |

| Noble Energy Mediterranean<br>Limited  | Israel  | \$  | 250,000,000  | Fossil fuel   |
|--|---|---|--|---|
| Jordan Marketing Limited   | Jordan  | \$  | 250,000,000  | Fossil fuel   |
| Amandi Energy Limited  | Ghana   | \$  | 209,842,951  | Fossil fuel   |
| Naftogas   | Ukraine   | \$  | 250,000,000  | Fossil fuel   |
| Tè Power Company   | Guinea  | \$  | 50,000,000   | Fossil fuel   |
| Tè Power Company   | Guinea  | \$  | 50,000,000   | Fossil fuel   |
| ERU Trading  | Ukraine   | \$  | 38,000,000   | Fossil fuel   |
| State Enterprise National<br>Nuclear Energy Generating<br>Company "Energoatom" (ap-<br>proved and reported in 2017<br>annual report, disbursed in<br>2018) | Ukraine   | \$  | 270,000,000  | Other   |
| Alto Maipo   | Chile   | \$  | 5,000,000  | Other   |
| Jamaica Public Serrvice<br>Company   | Jamaica   | \$  | 88,000,000   | Other   |
| Taiba Wind   | Senegal   | \$  | 12,213,579   | Renewable   |
| Taiba Wind   | Senegal   | \$  | 13,000,000   | Renewable   |
| EuroCape Ukraine I   | Ukraine   | \$  | 22,500,000   | Renewable   |
| EuroCape Ukraine I   | Ukraine   | \$  | 22,500,000   | Renewable   |
| EuroCape Ukraine I Limited   | Ukraine   | \$  | 150,000,000  | Renewable   |
| EuroCape Ukraine I   | Ukraine   | \$  | 275,000,000  | Renewable   |
| Gigawatt Global Burundi S.A.   | Burundi   | \$  | 10,000,000   | Renewable   |
| SunEdison Italia Construc-<br>tion S.r.l Jordan PSC  | Jordan  | \$  | 5,082,843  | Renewable   |
| Kipeto   | Kenya   | \$  | 50,000,000   | Renewable   |
| CrossBoundary  | Tanzania  | \$  | 6,000,000  | Renewable   |
| Beyond the Grid Solar  | All countries   | \$  | 10,000,000   | Renewable   |
| Solar Energy Transformation<br>Fund (SunFunder)  | All countries   | \$  | 22,500,000   | Renewable   |
| Solar Energy Transformation<br>Fund (SunFunder)  | All countries   | \$  | 5,000,000  | Renewable   |
| Mytrah Vayu (Sabarmati)  | India   | \$  | 225,000,000  | Renewable   |
| FinLux Ellen Sarl  | Chad  | \$  | 10,000,000   | Renewable   |
| Phanes Energy Renewables<br>Nkhotakota Limited   | Malawi  | \$  | 50,000,000   | Renewable   |
| Phanes Energy Renewables<br>Nkhotakota Limited   | Malawi  | \$  | 1,666,550  | Renewable   |
| SIMA   | Multiple<br>Regions   | \$  | 20,000,000   | Renewable   |
| d.light  | Kenya   | \$  | 4,500,000  | Renewable   |
| Lekela Egypt Wind Power  | Egypt   | \$  | 83,900,000   | Renewable   |
| Energética Argentina   | Argentina   | \$  | 115,500,000  | Renewable   |
| Vientos Neuquinos  | Argentina   | \$  | 122,600,000  | Renewable   |
|  | Noble Energy Mediterranean<br>LimitedJordan Marketing LimitedAmandi Energy LimitedNaftogasTè Power CompanyTè Power CompanyERU TradingState Enterprise National<br>Nuclear Energy Generating<br>Company "Energoatom" (ap-<br>proved and reported in 2017<br>annual report, disbursed in<br>2018)Alto MaipoJamaica Public Serrvice<br>CompanyTaiba WindEuroCape Ukraine IEuroCape Ukraine IEuroCape Ukraine IEuroCape Ukraine IGigawatt Global Burundi S.A.SunEdison Italia Construc-<br>tion S.r.l Jordan PSCKipetoCrossBoundaryBeyond the Grid SolarSolar Energy Transformation<br>Fund (SunFunder)Solar Energy Transformation<br>Fund (SunFunder)Mytrah Vayu (Sabarmati)FinLux Ellen SarlPhanes Energy Renewables<br>Nkhotakota LimitedSIMAd.lightLekela Egypt Wind PowerEnergética ArgentinaVientos Neuquinos | Noble Energy Mediterranean<br>LimitedIsraelJordan Marketing LimitedJordanAmandi Energy LimitedGhanaNaftogasUkraineTè Power CompanyGuineaERU TradingUkraineState Enterprise National<br>Nuclear Energy Generating<br>Company "Energoatom" (approved and reported in 2017<br>annual report, disbursed in<br>2018)UkraineAlto MaipoChileJamaica Public Serrvice<br>CompanyJamaicaCompanySenegalTaiba WindSenegalEuroCape Ukraine IUkraineEuroCape Ukraine IUkraineEuroCape Ukraine IUkraineEuroCape Ukraine IUkraineGigawatt Global Burundi S.A.<br> | Noble Energy Mediterranean<br>LimitedIsrael\$Jordan Marketing LimitedJordan\$Amandi Energy LimitedGhana\$NaftogasUkraine\$Tè Power CompanyGuinea\$ERU TradingUkraine\$State Enterprise National<br>Nuclear Energy Generating<br>Company "Energoatom" (approved and reported in 2017<br>annual report, disbursed in<br>2018)Ukraine\$Alto MaipoChile\$Jamaica Public Serrvice<br>CompanyJamaica\$Taiba WindSenegal\$EuroCape Ukraine IUkraine\$EuroCape Ukraine IUkraine\$EuroCape Ukraine IUkraine\$Gigawatt Global Burundi S.A.<br>Solar Energy Transformation<br>Fund (SunFunder)\$Solar Energy Transformation<br>Fund (SunFunder)All countries<br>\$Solar Energy Transformation<br>Fund (SunFunder)All countries<br>\$Mytrah Vayu (Sabarmati)India\$FinLux Ellen SarlChad\$Phanes Energy Renewables<br>Nkhotakota LimitedMalawi<br>\$SIMAMultiple<br>Regions\$SIMAMultiple<br>Regions\$SIMAMultiple<br>Regions\$Vientos NeuquinosArgentinaSima Supple Su | Noble Energy Mediterranean<br>LimitedIsrael\$250,000,000Jordan Marketing LimitedJordan\$250,000,000Amandi Energy LimitedGhana\$209,842,951NaftogasUkraine\$50,000,000Tè Power CompanyGuinea\$50,000,000Tè Power CompanyGuinea\$50,000,000ERU TradingUkraine\$38,000,000State Enterprise National<br>Nuclear Energy Generating<br>Company "Energoatom" (ap-<br>proved and reported in 2017<br>annual report, disbursed in<br>2018)Ukraine\$270,000,000Jamaica Public Serrvice<br>CompanyJamaica\$88,000,000Jamaica Public Serrvice<br>CompanyJamaica\$88,000,000Taiba WindSenegal\$12,213,579Taiba WindSenegal\$13,000,000EuroCape Ukraine IUkraine\$22,500,000EuroCape Ukraine IUkraine\$150,000,000EuroCape Ukraine IUkraine\$150,000,000Gigawatt Global Burundi S.A.<br>Burundi\$10,000,000Sunctison Italia Construc-<br>tion S.r.I Jordan PSC\$50,000,000KipetoKenya\$50,000,000CrossBoundaryAll countries\$10,000,000Solar Energy Transformation<br>Fund (SunFunder)All countries\$5,000,000Nytrah Vayu (Sabarmati)India\$225,000,000FinLux Ellen SarlChad\$10,000,000Nythotakota LimitedMala |

| 2019 | Luz de Leon                                 | Argentina    | \$<br>50,000,000  | Renewable   |
|------|---|--------------|-------------------|-------------|
| 2019 | PetroTel (Texas)                            | Oman         | \$<br>300,000,000 | Fossil fuel |
| 2019 | PetroTel (Texas)                            | Oman         | \$<br>150,000,000 | Fossil fuel |
| 2019 | Joshi Technologies                          | Colombia     | \$<br>7,750,000   | Fossil fuel |
| 2019 | Parko Services                              | Colombia     | \$<br>3,000,000   | Fossil fuel |
| 2019 | Energía del Pacífico                        | El Salvador  | \$<br>350,000,000 | Fossil fuel |
| 2019 | Renergen; Tetra 4                           | South Africa | \$<br>40,000,000  | Fossil fuel |
| 2019 | Noble Energy - Dolphinus<br>Gas             | Egypt        | \$<br>250,000,000 | Fossil fuel |
| 2019 | Noble Energy - Arish-Ash-<br>kelon Pipeline | Egypt        | \$<br>180,000,000 | Fossil fuel |
| 2019 | Vista Oil & Gas                             | Argentina    | \$<br>300,000,000 | Fossil fuel |
| 2019 | Aleph Midstream                             | Argentina    | \$<br>150,000,000 | Fossil fuel |
| 2019 | Nouakchott Container Ter-<br>minal          | Mauritania   | \$<br>24,840,000  | Fossil fuel |

