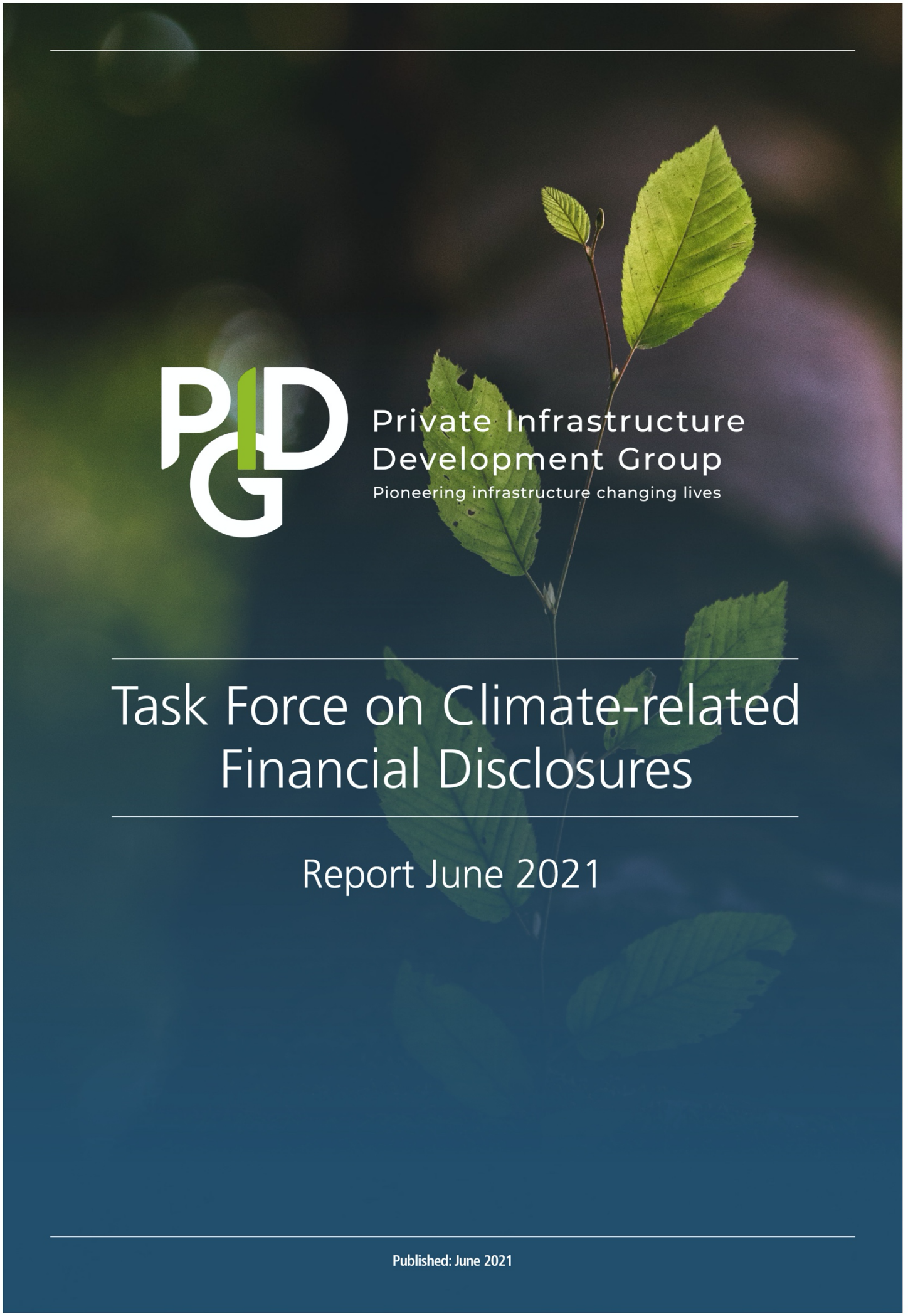


Task Force on Climate-related Financial Disclosures

Report June 2021

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Definitions

Fragile and Conflict-Affected States: as determined by PIDG based on a combination of the World Bank Harmonised FCAS list and the Fund For Peace's Index.

Least Developed Country: a low-income country facing severe structural deficits to sustainable development, as defined by the UN Committee for Development Policy.

Paris Agreement: legally binding international treaty on climate change adopted in December 2015 that aims to limit global warming to well below 2 degrees Celsius, preferably to 1.5 degrees, compared to pre-industrial levels.

PIDG Owners: the government departments, bilateral and international organisations that provide funding (through the Private Infrastructure Development Group Trust) to the PIDG companies, as listed on www.pidg.org

Foreword

The Private Infrastructure Development Group (PIDG) invests in infrastructure projects in the poorest and most fragile countries in sub-Saharan Africa and south and southeast Asia: over 50% of our investments are in Least Developed Countries and over 50% in Fragile and Conflict-Affected States.

The countries that PIDG invests in have some of the lowest historic and current per capita emissions of Greenhouse Gases (GHGs) in the world – yet they are the countries that are the most impacted by the changing climate, facing risks to health, livelihoods, food security, water supply, human security and economic growth.
Developing new infrastructure that is resilient enough to withstand the inevitable changes in climate over the coming decades is critical to achieving lasting impacts. Rapid population growth and urbanisation, as well as the aspirations of the predominantly young population, create the challenge and opportunity to plug the significant infrastructure gap in innovative ways.

PIDG is committed to demonstrating the technical and financial viability of innovative climate resilient infrastructure that contributes to a transition to global net zero. Developing greenfield infrastructure in the most difficult markets, where it matters most to sustainable socio-economic development, should be a deliberate focus of climate finance for an equitable and just transition.

This work is at the core of PIDG mandate. We believe that high risk project development – focused on innovative financing for solutions that leapfrog or replace high GHG emitting infrastructure – should receive substantially more attention and international efforts. Long-term debt, early-stage equity, guarantees and local currency solutions, technical assistance and viability gap funding will be key ingredients to achieve scale, replication and market transformation in this regard.

PIDG has a strong track record as a ‘market maker’ and innovator in the sustainable infrastructure space, particularly in renewable energy. PIDG companies developed and financed some of the first independent power producers’ projects in several frontier markets, including Pakistan and Cape Verde (wind), Vietnam (solar and hydro), Rwanda, Chad, Guinea, Mali, Burkina Faso (solar) and Ethiopia (geothermal).

PIDG investments pioneer technological innovation, for example Cabeolica – one of the first commercial scale wind Independent Power Producers (IPP) in Africa, KivuWatt in Rwanda – harnessing harmful gas from Lake Kivu for clean energy production, Golomoti Malawi – one of the first on grid solar photovoltaic (PV) plants with a Battery Energy Storage System – and more recently EkoRent / Nopea in Nairobi, the first fully electric taxi service in an African capital.

Domestic capital market development is a central component of PIDG work, as demonstrated by the focus on local currency solutions, setting up local vehicles like InfraCredit Nigeria and InfraZamin Pakistan and the development of the green bond market in local currency.

We know that the scale and urgency of the climate emergency means that there is much more to do. We look forward to working with all our stakeholders including Owners, sponsors, staff and the wider PIDG community to accelerate progress towards the goals of the Paris Agreement, supporting the development of low carbon, climate resilient infrastructure and mobilising flows of climate finance to countries with the widest infrastructure gap.

Introduction

2021 is a critical year for tackling climate change in the run up to the 2021 United Nations Climate Change Conference (COP26) and as the global community deals with the continued repercussions from the COVID-19 pandemic.

PIDG is delighted to present its first disclosure report to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which PIDG became a supporter of in January 2020.

Climate change mitigation and resilience is embedded throughout the operations and investments of all the companies in The Private Infrastructure Development Group. This first disclosure report outlines our approach and our initial results. It is structured around the four pillars outlined by the TCFD – namely Governance, Strategy, Risk and Metrics.

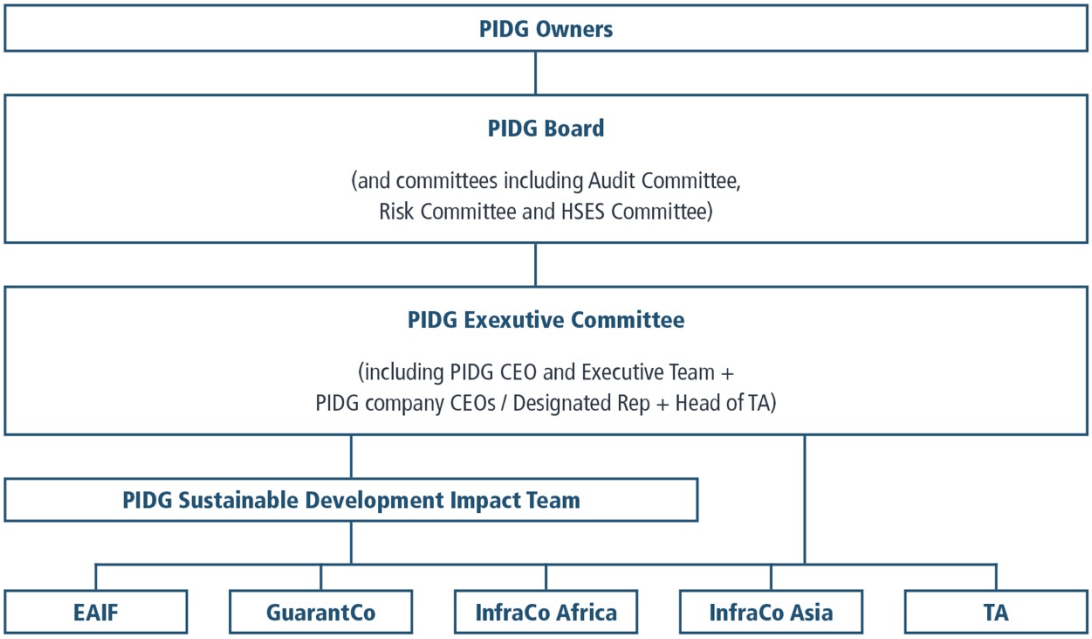
1. Governance

Climate change considerations will impact on many different areas of PIDG activity including Business Planning and Strategy; Risk; Health, Safety, Environment and Social (HSES) Standards and Sustainable Development Impact. PIDG has developed a governance structure that aims to ensure that impacts of climate change are considered across all of these:

Board and Owner oversight	Overall oversight of PIDG climate-related activities and TCFD reporting lies with the PIDG Ltd.'s Board of Directors (the "Board") and it is a standing item on the Agenda for each Board meeting. The Board level sponsor is the Chair of the Board. A quarterly update is provided to the Board on relevant activities in the last quarter and planned for the next. The Board considers the impacts of climate change as part of wider discussions on the future strategic direction of PIDG, including in discussions around business planning, strategy and risk. Where appropriate, climate-related activities will also be considered by PIDG Committees including, inter alia, the Audit Committee; the Risk Committee and the HSES Committee as well as the Investment Committee and the Credit Committee Updates on climate-related activities are provided on an annual basis to PIDG Owners, or more frequently as required.
Management role	At an operational level, PIDG climate-related activities are led by the PIDG Sustainable Development Impact (DI) team, co-ordinating input from Risk, HSES, Finance, Legal and all PIDG companies (namely InfraCo Asia, InfraCo Africa, GuarantCo and the Emerging Africa Infrastructure Fund) and PIDG Technical Assistance. The PIDG Executive Committee (ExCo) level sponsor is PIDG's Head of Sustainable Development Impact. Updates on climate-related activities are a standing item on the agenda of the PIDG ExCo (consisting of the PIDG Ltd.'s Executive Team and PIDG company CEOs) which meets twice monthly. An update is provided by the Head of Sustainable Development Impact at each meeting, with input from other members of the ExCo as required. PIDG ExCo reviews climate-related activities and make recommendations to the PIDG Board as required.

Investments	PIDG applies a deliberate climate lens to its investments. Climate impacts are considered throughout the different stages of PIDG companies' involvement with a project. All new projects supported (both directly and via financial intermediaries) must be aligned with the PIDG Climate Change Standard, which contains specific guidance for assessing projects in the energy and transport sectors that qualify for PIDG support. For projects in the pipeline, an initial estimation of GHG emissions is made based on available information ex-ante. This consists of an estimation of annual emissions forecast during operation, based on expected operating parameters. From these numbers, an estimate of the emissions intensity of the proposed investment is also made. The results of these calculations feed into the PIDG Sustainable Development Impact (DI) scorecard for all new potential investments. An initial screening of both physical and transition climate risks to projects is also made on entering the pipeline (see section 3). Investments that provide innovative solutions to climate related issues are actively prioritised. An assessment of physical and climate risks as well as overall impact on climate outcomes is considered for each investment in the relevant Investment or Credit Committee. Since 2020, in order to track progress of PIDG overall and PIDG individual company performance on climate change, PIDG has set specific climate change Key Performance Indicators (KPIs). In 2020, this KPI was related to alignment to the goals of the Paris Agreement for new energy sector investments. In 2021-23, this KPI relates to the carbon intensity of all new investments (tCO2e/mUSD PIDG investment). Achievement of KPIs (including the climate change KPI) is directly linked to the performance appraisal of the PIDG companies. For projects in operation, where PIDG still has an active interest and where ex ante assessment finds that estimated GHG emissions are expected to be significant (currently set at >25,000tCO_2e each year), emissions of GHGs are reported annually to PIDG. This information will usually be collected as part of existing monitoring procedures, for example as part of a PIDG company Annual Monitoring Report (AMR), and collated by the PIDG Sustainable Development Impact team.
Operations	PIDG is working to consider climate change in all aspects of operations. Primary sources of emissions from PIDG operations are business travel and our offices. Whilst these emissions reduced in 2020 due to restrictions related to the COVID-19 pandemic, PIDG is conscious of the need to place our operations emissions on a net zero trajectory in a post-COVID recovery period. We aim to use the learnings from how we adapted operations due to COVID-19 restrictions to inform how we can move towards net zero operations moving forward. During 2021, we will also be examining the impact of other aspects of our operations and activities, including homeworking, commuting and our procurement activities. PIDG General Counsel is undertaking work to embed climate change considerations into our legal documentation including: • Draft climate change clauses in transaction documentation and procurement documents, including our sustainability requirements in procurement documentation and model contracts. • A draft Green Transaction protocol for conducting transactions with climate change considerations in mind. • Employer/employee sustainability obligations in staff handbooks and employment contracts. Following a pilot phase, we aim to adopt these documents as standard in PIDG legal documentation, as well as making templates open source for others to use.

Figure 1: PIDG Climate Change Governance Structure



PIDG companies are working to put climate change at the centre of their operations – and to share best practice across the Group. For example:

PIDG Climate Change Team Platform

PIDG is working to establish a dedicated online climate change platform to enable discussion, knowledge sharing and dissemination of best practice across the Group. The platform will be used to:

- Exchange information and knowledge of new evidence that relate to climate change, climate finance and impacts of climate change in the markets that PIDG operates in.
- Improve awareness and exchange best practice of the measures being taken by PIDG to reduce GHGs in operations and through investments.
- Highlight new technologies, developments and behaviour innovations to reduce GHGs at work and at home.

GuarantCo: Climate Change Action Group

PIDG Company GuarantCo established a Climate Change Action Group (CCAG), led by their Managing Director for the Global Execution Team, with representation across the company, and a mandate to:

- Build a pipeline for GuarantCo that will accelerate developing countries transition to greener and more prosperous futures. Guidance notes have been prepared to provide a steer for the originators on which transactions to prioritise.
- Improve understanding of the GuarantCo portfolio's climate impact/risks and develop strategies for improving impact.
- Lower the carbon footprint of GuarantCo's operations. As well as offices and travel, this will consider indirect impacts of GuarantCo's operations (e.g. through GuarantCo's equity portfolio).
- Drive change through increased awareness and engagement from the GuarantCo team and key stakeholders on climate issues and solutions. In 2020, the CCAG has undertaken a continual programme of engagement and awareness events for staff, designed to be fun, accessible and yet thought provoking.

2. Strategy

PIDG invests in infrastructure projects in the poorest and most fragile countries in sub-Saharan Africa and south and southeast Asia: over 50% of our projects are in Least Developed Countries and over 50% in Fragile and Conflict-Affected States. PIDG has a mandate to contribute to poverty alleviation by developing and investing in basic infrastructure. Despite some progress in recent years, globally 789 million people still have no access to electricity, 785 million people still lack a basic drinking water service, and over 1 billion people still live-in slums[1] – and the COVID-19 pandemic has reversed progress in many areas. Only 17% of the population in sub-Saharan Africa has access to clean cooking fuels and only 35% in developing regions in Asia, with biomass the main source of fuel causing an estimated 490,000 premature deaths a year and putting additional pressures on natural resources.[2]

The countries that PIDG invests in have some of the lowest historic and current per capita emissions of GHGs in the world – yet are the countries that are going to be most impacted by the changing climate, facing risks to health, livelihoods, food security, water supply, human security and economic growth. Developing new infrastructure that is resilient enough to withstand the inevitable changes in climate over the coming decades is critical to achieving lasting impacts.

Rapid population growth and urbanisation as well as the aspirations of the predominantly young population create the challenge and opportunity to plug the significant infrastructure gap in innovative ways.
We recognise that new infrastructure is associated with increased GHGs in both the materials used to construct, for example, buildings, transport facilities and power plants, and in using the infrastructure once it is in place. Further, the typically long lifetime of infrastructure assets means that there is a risk of 'locking in' carbon intensive infrastructure for decades to come.

Our strategy therefore focuses on the opportunities for accelerating the transition to net zero in the countries in which we operate through the development and financing of innovative low carbon, climate resilient and inclusive infrastructure, supporting these countries to leapfrog and replace the highest GHG emitting technologies. Whilst PIDG might not remain involved in a project for its full lifetime, we take a long-term view for potential investments, considering potential policy and market changes as well as a changing climate to mid-century.

This approach builds on PIDG's historic role as a pioneer in developing clean energy projects in emerging markets, having developed and financed some of the first Independent Power Producer (IPP) renewable energy projects in countries including Cape Verde, Rwanda, Pakistan, Vietnam, Chad, Malawi and Mali. By developing sustainable and viable projects in these markets, we believe we will enable further climate finance to be unlocked, enabling countries to transition more quickly to net zero at the same time as developing their economies and alleviating poverty, contributing to a just and equitable transition.

[1] UNSTATS SDG Indicators Report 2020

[2] International Energy Agency – SDG 7 Data and Analysis – flagship report 2020

Integrating climate and gender investment lenses

Climate change has a greater impact on those sections of the population that are most reliant on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards, such as droughts, landslides, floods and hurricanes. This applies to all countries. Women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty, and the majority of the world's poor are women. Women's unequal participation in decision-making processes and labour markets compound inequalities and often prevent women from fully contributing to climate-related planning, policy-making and implementation.

Yet, women can and do play a critical role in the response to climate change due to their local knowledge of and leadership in e.g. sustainable resource management and/or leading sustainable practices at the household and community level. Women's participation at the political level has resulted in greater responsiveness to citizen's needs, often increasing cooperation across party and ethnic lines and delivering more sustainable peace. At the local level, women's inclusion at the leadership level has led to improved outcomes of climate related projects and policies. On the contrary, if policies or projects are implemented without women's meaningful participation it can increase existing inequalities and decrease effectiveness.

PIDG acknowledges the link between addressing gender inequalities and tackling the climate crisis and will therefore adopt principles of gender lens investing in its investment decisions.

PIDG therefore puts both climate and gender considerations at the core of its investment approach. The Group introduced climate and gender KPIs for each PIDG company in 2020. In order to support an integrated approach, PIDG reviews each potential investment's impact on people, planet, and market transformation before moving it to the investment or credit committee stage. Compliance with PIDG Climate Change Standards and Gender Equality Standard are two of three minimum compliance thresholds in the very first investment screening (the other being financial additionality).

More specifically, each deal is explicitly screened for climate and gender related risks as well as opportunities to generate positive outcomes for planet and women. The sustainable development impact rating of each investment is heavily influenced by its expected outcomes for the planet and for women, and this is a key consideration in investment decision making.

This allows PIDG to ensure that each deal is as gender- and climate-smart as possible, and that key impact monitoring indicators are included in legal documentation to guarantee accountability and learning.

Supporting the Transition to Net Zero

As the global community moves to address climate change, government and investor policy shifts and the emergence of new technologies will lead to risks (and opportunities) for companies and investments that are misaligned to the transition to net zero. PIDG has already taken measures to mitigate against transition risks in new investments through adoption of a Climate Change Standard for all new direct and indirect investments and planned updates to the PIDG Investment Policy.

This means that PIDG will no longer finance, directly or indirectly:

- Coal or Heavy Fuel Oil (HFO) fired power plants.
- Upstream investment in coal, oil or gas extraction, processing or production.
- New transport infrastructure (road, rail, waterway and port) constructed mainly for the transport of fossil fuels.

Gas fired power plants and associated infrastructure (e.g. pipelines, storage and distribution) will only be supported following a positive outcome of a systematic assessment to determine their alignment with the Paris Agreement goals.

Similarly, investments that are based mainly on fossil fuel-based transport systems (e.g. airports; roads; ferries, railways and ports) will only be supported by PIDG following a positive outcome of an assessment to determine their alignment with the Paris Agreement goals.

PIDG's approach for investments in the energy and transport sector covers most of the high emitting sectors that we invest in. The other key high emitting sector PIDG invests in is infrastructure that serves manufacturing industries (steel, cement, chemicals and fertilisers), but for this sector, as for some other sectors not covered so far (e.g. affordable housing), defining positive and negative technology lists for potential investments is more difficult as improvements are mainly around reducing the GHG intensity per unit of product through improvements in the manufacturing process or in construction. Therefore, for potential investments in these sectors, PIDG is working with project sponsors to reduce transition risks by considering measures to reduce emissions of GHGs where practicable. For example:

- For new investments in the housing sector, we support developments that achieve EDGE certification[3].
- For new investments in the manufacturing sector, we would assess the extent to which operations are on a trajectory aligned with the Paris Agreement goals, for example in line with the Transition Pathway Initiative[4].

For the existing PIDG portfolio, some exposure to transition risk remains from historic investments in emission intensive infrastructure. Work is ongoing to determine how material this risk is based on the geographies that PIDG operates in and will consider, for example:

- Availability of alternative technologies.
- Likelihood of policy and regulatory changes (e.g. carbon pricing being adopted).
- Reputation risk for PIDG.

Analysis is also ongoing to set an emission reduction target to ensure the PIDG portfolio is on a Paris Aligned pathway, considering the sectors and geographies that PIDG operates in.

Opportunities from the Low Carbon Transition

PIDG companies have already identified opportunities to take a leadership role in supporting new and emerging low/ zero carbon technologies in the markets in which we operate, building upon pathfinding transactions undertaken in recent years. PIDG is currently focusing on increasing investment in the following sectors: renewable energy – both on grid and off-grid; transport – electric mobility; energy efficient affordable housing and sustainable cities; and developing the green bond market in underserved low income and emerging markets

PIDG is also supporting investee companies in this transition. For example, in 2020-21, PIDG has funded a study to develop a Clean Energy Transition Strategy and road-map for InfraCredit Nigeria – an innovative credit enhancement facility that PIDG helped establish – to align its portfolio with Nigeria's Nationally Determined Contribution (NDC) and contribute to the Paris Agreement objectives.

InfraCo Africa: EkoRent Nopea

PIDG Company InfraCo Africa has joined forces with EkoRent Oy (EkoRent) to support the expansion of its Nairobi-based electric taxi company, NopeaRide. Established in 2017, NopeaRide is the first 100% electric taxi-hailing service on the continent. The company runs a small fleet of electric vehicles and has built charging stations located across the city, with drivers and customers accessing the platform via a mobile application.

[3] About | EDGE Buildings

[4] Home - Transition Pathway Initiative

InfraCo Africa's involvement will enable the company to grow its NopeaRide Electric Vehicles fleet to up to 100 vehicles (70 additional vehicles), in tandem with the expansion of the required charging infrastructure across the city. New charging stations will be rolled out in an efficient and cost-effective manner using journey data derived from Nopea applications (both drivers and passengers), Nopea vehicles, charging stations, and by monitoring of traffic flow and popular journey routes.

As well as cutting direct greenhouse gas emissions, NopeaRide's electric vehicles and charging systems reduce the running costs and maintenance burden of its fleet when compared with taxis which use combustion engines. For drivers, these cost savings are reflected in 30-50% higher incomes than they could earn driving conventional taxis. NopeaRide plans to move towards driver-owned vehicles, with plans to offer maintenance training and technical services.

The company is committed to providing equal pay, equal job access for women drivers and to safeguarding women as both drivers and as passengers, as a unique offer to women customers. The ambition is to empower women in non-traditional roles in a heavily male-dominated sector.

The EkoRent model is highly replicable, and it is anticipated that, by enabling the company to scale its offering in Nairobi, the project will attract private investment into the electrification of private and business transportation in cities across the region.

InfraCo Asia: Prism Energy

PIDG Company InfraCo Asia and Albario Engineering Private Limited (AEPL) have entered into a joint investment and development agreement to establish Prism Energy. This joint venture company will develop and implement commercial & industrial (C&I) rooftop solar projects across Pakistan, thus providing new and improved access to clean and renewable energy sources. Prism aims to introduce international best practice to distributed solar development in Pakistan, by leveraging the development expertise of InfraCo Asia and its contracted developer Equicap Asia, as well as the on-ground experience of its local partner AEPL.

The Prism team brought into operations its first C&I solar energy facility in January 2021 through providing electricity to the Pearl Towers in Faisalabad, Pakistan. The 248kW facility is part of Prism's larger C&I solar platform, through which its shareholders are aiming to roll out C&I solar projects at scale. By demonstrating the commercial viability of high-quality, net metered C&I solar solutions, InfraCo Asia and AEPL expect to crowd-in greater private sector investments for Pakistan's distributed solar sector.

GuarantCo, EAIF, InfraCo Africa and PIDG TA: Acorn Housing

PIDG Company GuarantCo provided a partial credit guarantee to investors in Acorn's KES 5 billion note programme to fund the construction of accommodation for students in Nairobi. This was the first ever green bond in Kenya with dual listing on the Nairobi and London stock exchanges and was rated B1 by Moody's – higher than the sovereign bond rating.

The PIDG Company Emerging Africa Infrastructure Fund (EAIF) was also involved in the project with a participation of KES 1.279 billion in the note programme. The funds were used to finance the construction of green-certified student accommodation developed by Acorn in Nairobi, creating clean, safe and affordable accommodation for up to 5,000 students.

The note programme was the first ever to achieve green certification in Kenya and the construction of the student accommodation will meet international green building EDGE standards for water, energy and construction materials, ensuring lower operation costs and a low-carbon impact over the long-term.

The issuer Acorn was supported to take a deliberate gender angle in the design and management of the buildings, developing tailored solutions to ensure safety and well-being of women students as part of their positioning in the market.

In December 2020, Acorn launched two Real Estate Investment Trusts (REITs) to finance the phased delivery of Acorn's business plan. As anchor investor, PIDG company InfraCo Africa committed KES 1.098 billion to the innovative Investment and Development REITs, attracting finance from local institutional investors. InfraCo Africa was also instrumental in drafting the agreements and ensuring that EDGE climate change and good HSES practices were implemented.

Investing in Climate Resilient Infrastructure

PIDG works in some of the countries considered most vulnerable to the impacts of climate change and some of the countries least prepared to deal them. Changing weather patterns and increased numbers of extreme weather events caused by climate change have the potential to be a material risk for PIDG at a company level and also at an individual project level.

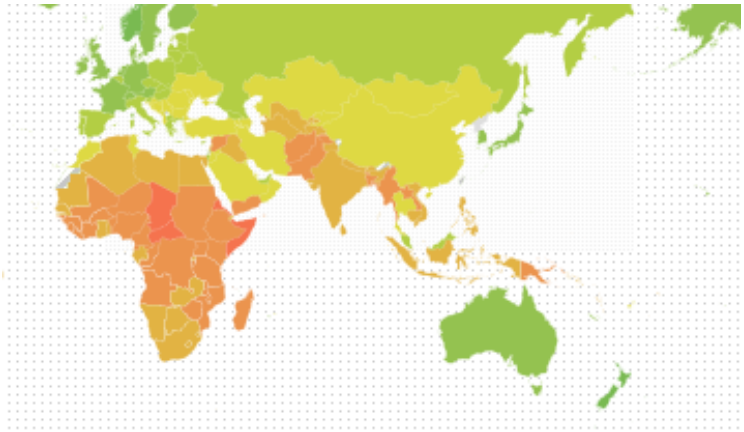


Figure 2: The ND-GAIN Country Index summarises a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience (https://gain.nd.edu/our-work/country-index/). Vulnerable countries are shown in red and orange and these are concentrated in the countries where PIDG has its focus.

PIDG companies, as part of their due diligence, already consider exposure of investments to climate hazards such as flooding, wildfires and extreme heat and appropriate mitigation measures that can be adopted to mitigate the risk.

PIDG has recently started piloting a tool to systematically screen for physical climate risk for new investments (see below). A key area of work over the course of 2021 will be to consider exposure to physical climate risks of the existing portfolio and how these can be managed and/or mitigated.

Investing in Climate Change Adaptation and Resilience

As well as considering how investments in all sectors can be made more resilient to the impacts of climate change, PIDG is also actively supporting investments that are specifically focused on increasing the resilience

of the communities and countries in which we operate. Over the course of 2021 we will be looking at further opportunities for PIDG in this – for example by considering opportunities for investment in nature-based solutions.

InfraCo Africa – Bonergie

The agriculture sector is one of the most vulnerable to the impacts of climate change – with farmers across Africa facing drought and rising temperatures that will reduce crops yields and therefore income. In Senegal, farmers largely depend upon the country's rainy season for irrigating crops, limiting yields and leaving them vulnerable to fluctuating rainfall.

InfraCo Africa and solar equipment specialist, Bonergie Senegal, have established a local company Bonergie Irrigation, to implement high quality irrigation systems across rural Senegal. The Bonergie Irrigation project will pilot the use of a Hire Purchase Agreement (HPA) with farmers, under which each farmer will pay for an irrigation system over a period of 18 months. At the end of the HPA period, each farmer will become energy autonomous, owning his or her system outright, with the option to enter into a maintenance agreement with Bonergie Irrigation. The choice of unit will be tailored to the needs of individual farmers and the project will provide water management training, drip irrigation and water storage towers.

As well as reducing emissions of CO_2 and operational costs (where solar powered systems replace diesel pumps), the project will deliver greater food security for rural families facing the impacts of climate change.

3. Risk

PIDG is piloting a climate risk screening procedure for all new potential investments that is integrated with PIDG's existing review and approval procedures for potential new investments. Prior to due diligence and any funds being committed to a project, PIDG DI and HSES teams undertake a review of the investment to assess potential impact on People and Planet, Wider Economy and Market Transformation; identify key potential HSES and DI risks; and outline any questions to be addressed in due diligence. Since January 2021, identification of climate risks (both physical and transition) is systematically included in this assessment.

Following feedback from PIDG ExCo and companies, the approach will be refined and formally included in PIDG initial screening and endorsement of potential investments. An outline of the approach we are piloting is below:

1. For ***physical climate risk,*** we consider:
   - **Geography:** if the project situated in a location that is at (very high/high/medium/ low) risk of climate hazards and if so, what climate hazards the project is potentially exposed to (e.g. flooding (river and sea), hurricanes, heat stress and water stress).
   - **Vulnerability:** if the project type is considered vulnerable to climate risks. For PIDG, we have framed this around the following 4 indicators[5], each of which can be assigned high, medium or low, depending on a qualitative assessment of impact on the investment:
     - Dependency of project operation/ outputs on natural resources and weather (including water availability).
     - Climate sensitivity of market demand for project/ project outputs.
     - Vulnerability of supply chain; reliance on secure transport routes and secure energy supply.
     - Reliance on labour for project operation.

2. For ***transition risks,*** we firstly screen to ensure the investment is in line with the PIDG Climate Change Standard and also make an estimate of GHGs associated with the investment (scope 1, 2 and, in some cases, scope 3). In addition, the following questions are considered to understand exposure of an investment or potential investment:

   - **Geography:** if the project is located in a country/ ies with a strong policy environment for climate change and renewable energy that will impact on the project, directly or indirectly.
   - **Climate sensitivity of the sector:** if the project is likely to be impacted by changing policies, technologies and public sentiment around the transition to a low carbon economy. PIDG uses the following indicators to assess the potential vulnerability of the project to transition risk, each of which can be assigned high, medium or low, depending on a qualitative assessment of impact on the investment:
     - Direct impact of policy to reduce GHG emissions e.g. a tax on carbon emissions.
     - Indirect impact of policy to reduce GHG emissions (considering reliance of project on high carbon inputs in supply chain (e.g. cement, oil) and electricity).
     - Potential impact on revenue due to availability of lower carbon alternatives.
     - Level of investment needed to compete in a lower carbon economy.

Based on the results of the screening exercise, follow-up actions may be required:
- Indicators all 'low'– no further action needed.
- Indicators deemed 'high' or 'red flag' – issue to be investigated further during due diligence.
- Indicators deemed 'medium' – suggestion to investigate further during due diligence.

[5] Adapted from UNEP FI, Charting a New Climate, 2020

For projects deemed exposed to physical climate risks, the Environmental and Social Impact Assessment (ESIA) and/or technical feasibility study provides an opportunity to consider further the probability of potential exposure to chronic and acute physical climate risks and measures that can be put in place to reduce that risk. For projects deemed exposed to transition climate risks, PIDG and the company deal team will undertake a more detailed transition risk assessment based around policy and legal risk, technology and market risk and reputation risk.

Results of these assessments are included in the investment paper for the project – including what risks remain after mitigation actions – as well as consideration of how other risk categories may be impacted by this (e.g. credit risk, HSES risk and DI risk).

EAIF, InfraCo Africa, GuarantCo and PIDG TA: Kalangala Infrastructure Services (KIS)

KIS is a pioneering mixed utility company operating on Bugala Island, situated on Lake Victoria in Uganda's Kalangala District. KIS has delivered and now operates two modern roll-on roll-off ferries; has upgraded the island's 66km Luuku – Mulabana main road; is distributing clean water to 19 villages on the island; and has developed 1.6MW of hybrid solar-battery-diesel power and recently took over operation of the Kalangala Town Council (KTC) grid.

KIS continually assess the risks posed by the water levels in Lake Victoria, which have recently been rising. They have already constructed barriers to protect the water abstraction assets and have also modified the ferry docks to create a temporary docking area. KIS has also been in discussions with the Ministry of Works and Transport of Uganda to rehabilitate (raise) the dock area and access road to make the infrastructure more resilient to future water level rises and extreme weather events.

4. Metrics and Targets

GHGs from PIDG operations

PIDG is committed to reaching net zero in its operations. Our 2 key sources of emissions are business travel and our (multi-occupied) offices. To better understand our impact, data was collected from each PIDG company on flights taken for PIDG business purposes over the course of 2019. In addition, data was collected on electricity and fuel consumption of PIDG company offices in London, Nairobi, Singapore and Cape Town. Based on analysis of data collected, emissions by PIDG companies were estimated to be almost 2500 tCO_2e in 2019, of which 95% were from flights.

PIDG's emissions for 2020 will of course look very different due to reductions in travel and this will be an opportunity to consider measures to reduce future operational GHG emissions. For example, InfraCo Africa has opened regional offices in Casablanca and Nairobi which has reduced the average flight distance to undertake site visits and hence the associated emissions.

It will also be an opportunity to lead by example, and we will be asking our suppliers and clients to increase ambition in addressing climate change through, for example, our procurement activities. This work has already started: our pension provider is Scottish Widows who have committed to halving the carbon footprint of their investments by 2030 and reaching net zero across all their investments by 2050[6].

PIDG companies are currently considering next steps in our aim to reduce emissions from our operations, while recognising that reducing our absolute emissions to zero will be very difficult given the nature of our business. Our approach will focus on reducing our emissions as far as practicable and use of carbon credits to reach net zero.

Over the course of 2021, we will be undertaking further work to determine:

- How we will reduce emissions from our operations, particularly from flights.
- What other sources of emissions we should include in our calculations (e.g. commuting, home working and procurement).
- How we can support our clients, suppliers and other stakeholders to modify their behaviour to reduce GHG emissions in their operations.
- What target we should set to track progress in reducing our emissions.
- What role carbon offsets and emission removal activities can play in helping us to reach net zero in our operations.

This work will be ongoing over the course of 2021 and we will present an update in our next TCFD report.

GHGs from PIDG investments

PIDG has calculated the GHG emissions from investments using the Global GHG Accounting and Reporting Standard for Financial Institutions published by the Platform for Carbon Accounting Financials (PCAF)[7]. Results are presented in the table below for the most recent year of data available (2019).

Note that under the PCAF methodology, emissions from guarantees are only included when the guarantee is called and converts to a loan. PIDG however, wants to recognise the emissions from all guarantees so all are included here, whether the guarantee has been called or not, aware that we are mostly guarantying local banks that might not be reporting to TFCD recommendations.

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[6] Our climate change approach - Responsible Investment - Scottish Widows

[7] The Global GHG Accounting and Reporting Standard for the Financial Industry (carbonaccountingfinancials.com)

In line with PCAF recommendations, PIDG includes scope 3 emissions where they are likely to be significant. At this stage, we have included scope 3 emissions from oil and gas infrastructure and processing, as well as from vehicles using roads infrastructure. As guidance develops in accounting for scope 3 emissions, we shall look to increase our coverage of scope 3 emissions of investments.

Please refer to Appendix 1 for further methodological notes.

Table 1: GHG emissions from PIDG investments in 2019

PIDG – overall Group	***Scope 1 and 2***	***Scope 3***
Total emissions from operational projects in PIDG portfolio (tCO_2e)[8] [9]	7,531,078	5,050,111
PIDG total attributed emissions from operational projects (tCO_2e)	459,092	695,846

PIDG – disaggregated by PIDG Company	***EAIF (Debt)***	***GuarantCo (Guarantees)***	***InfraCo Africa (Equity)***	***InfraCo Asia (Equity)***
Total emissions from operational projects - scope 1 and 2 (tCO_2e)	5,467,914	2,439,199	1,687	106
Total emissions from operational projects - scope 3 (tCO_2e)	0	5,050,111	0	0
PIDG attributed emissions from operational projects - scope 1 and 2 (tCO_2e)	241,389	217,330	267	106[10]
PIDG attributed emissions from operational projects - scope 3 (tCO_2e)	0	695,846	0	0

Avoided Emissions and Emission Removals

PIDG does not currently have any projects that result in emission removals although we are actively considering investment opportunities in this sector. In line with the PCAF Standard, we report below on avoided emissions from project financed grid connected renewable energy projects in operation in 2019[11]. As above, we include emissions avoided from guarantees.

[8] Note: Overall Group total emissions from operational projects is less than the sum of total emissions by company as some investments are funded by more than one PIDG company so only counted once in the PIDG total to avoid double counting

[9] Overall Group total emissions includes emissions from guarantees whether the guarantee has been called or not, aware that we are mostly guarantying local banks that might not be reporting to TFCD recommendations.

[10] Given the small volume of emissions from InfraCo Asia projects, PIDG includes all of these in the attributed emissions as a conservative approach

[11] In line with PCAF, we use the operating margin emission factor, published by the IFI Technical Working Group on Greenhouse Gas Accounting (IFI TWG - List of methodologies | UNFCCC)

Table 2: Avoided GHG emissions from PIDG investments in 2019

PIDG – overall Group	
Total avoided emissions from operational projects in PIDG portfolio (tCO_2e)	232,846
PIDG total attributed avoided emissions from operational projects (tCO_2e)	63,282

PIDG – disaggregated by PIDG Company	***EAIF (Debt)***	***GuarantCo (Guarantees)***	***InfraCo Africa (Equity)***	***InfraCo Asia (Equity)***
Total avoided emissions from operational projects (tCO_2e)	138,931	39,244	0	54,671
PIDG attributed avoided emissions from operational projects (tCO_2e)	30,387	26,456	0	6,438

Metrics and KPIs

In October 2019, the PIDG Board agreed the following climate related KPIs for 2020 for new energy sector investments:

- 50-75%[12] of investments in the energy sector[13], by number of projects, will be aligned with the Paris Agreement, including transitional projects in developing countries[14].
- From 2020, no new energy projects in the PIDG pipeline will be misaligned to the Paris Agreement.

In 2020, 7 energy sector projects reached financial close of which 5 were deemed to be aligned with the Paris Agreement (71%) meaning that this climate related KPI was met. All new energy projects entering the PIDG pipeline were aligned based on assessment by the PIDG Development Impact team.

For 2021-23, all new PIDG investments in the energy and transport sectors should be aligned (apart from 2 final remaining legacy projects). PIDG has also set a KPI in the form of a cap based on the carbon intensity of new investments. This is calculated as the PIDG attributed GHG emissions in a typical full year[15] of operation of all investments financially closed in the year, divided by the $m invested. The measure is a proxy, applicable across all investment sectors, for the future financed emissions that we are locking in every year. Progress towards this KPI will be reported on in subsequent TCFD Disclosures, as well as work to assess the appropriateness of setting a target for reductions in absolute emissions of the PIDG portfolio.

[12] This figure was chosen to allow some legacy misaligned projects to reach financial close in 2020

[13] i.e. projects categorised as 'power and energy' and 'oil and gas transportation, distribution and storage'

[14] As outlined in PIDG Paris Alignment methodology

[15] First year of full operation for transport investments

Appendix 1

This appendix gives more detail as to how PIDG has reported financed emissions in line with the PCAF Standard, in particular chapter 6 of the Standard, reporting recommendations and requirements. Note, we have calculated and checked the financed emissions in-house. These have not been validated externally but we will consider this in future years.

PCAF reporting recommendations and requirements	PIDG alignment
Report using the operational or financial control consolidation approach	PIDG has calculated financed emissions for all investments by PIDG companies.
Overall Reporting Requirements and Recommendations	Financed emissions were calculated at a fixed point in time, namely 31 December 2019, in line with the financial reporting cycle
Coverage	Financed emissions were calculated for all investments and investment types made by PIDG, namely debt (EAIF), equity (InfraCo Asia and InfraCo Africa) and guarantees (GuarantCo). Note while under the PCAF methodology, emissions from guarantees are only included when the guarantee is called and converts to a loan. PIDG wants to recognise the emissions from all guarantees so all are included here, whether the guarantee has been called or not, aware that we are mostly guarantying local banks that might not be reporting to TFCD recommendations.
Gases and units	PIDG GHG calculations accounted for all 7 GHGs under the Kyoto protocol, which were converted to tonnes of carbon dioxide equivalent.
Absolute emissions	PIDG GHG emission calculations include combined scope 1 and 2 emissions of each investment. Figures are disaggregated at the PIDG company level. PIDG includes scope 3 emissions where they are likely to be significant. At this stage, we have included scope 3 emissions from oil and gas infrastructure and processing, as well as from vehicles using roads infrastructure. As guidance develops in accounting for scope 3 emissions, we shall look to increase our coverage of scope 3 emissions of investments. Lifetime emissions have not been reported here but this is something that will be included in future reporting.
Avoided emissions and emission removals	PIDG has included avoided emission calculations for grid connected renewable energy projects. These figures are reported separately from absolute emissions.
Emissions intensity	PIDG has not reported emission intensity of investments or of the portfolio at this stage, although it is something that may be reported on in future years.

Data quality	PIDG has used the most recent data available i.e. 2019. For PIDG investments, generally emissions are not reported by investees[16] therefore: • Project finance investments: Outstanding amount in the project and total project equity plus debt are known. Project emissions are not known but calculated using primary physical activity data for the project's energy consumption and emission factors (option 2a) or emissions are calculated using primary physical activity data for the project's production and emission factors (option 2b). • Corporate bonds/ business loans/ unlisted equity: PIDG did not collect EVIC data in 2019. Total Investment Commitment at financial close data was collected and was used as the denominator. Project emissions calculated as above (using options 2a and 2b). A weighted score for data quality has not been calculated at this stage but will be included in future reporting.

[16] Four PIDG investees publicly reported 2019 GHG data.