The ARM-Harith Cities & Climate Transition Fund (The ACT Fund)

LAB INSTRUMENT ANALYSIS
September 2021

DESCRIPTION & GOAL —
The ARM-Harith Cities & Climate Transition Fund (The ACT Fund) expands the pipeline of sustainable infrastructure projects in West Africa through a unique blended-currency mechanism that reduces financing friction at early project stages while providing structured exit solutions that mobilize local institutional investment.

SECTOR —
Sustainable Infrastructure, Sustainable Cities, Energy Access

FINANCE TARGET —
For commercial debt: Local institutional investors
For commercial equity: Institutional impact investors
For concessional support: Development finance institutions (DFIs)
For technical assistance and design: Foundations, DFIs

GEOGRAPHY —
Initial Focus: Nigeria, Ghana
The Lab identifies, develops, and launches sustainable finance instruments that can drive billions in low-carbon investment. The 2021 Lab cycle targets three specific sectors: Sustainable food systems, sustainable energy access, and sustainable cities, in addition to two regions: Brazil and Southern Africa.

AUTHORS AND ACKNOWLEDGEMENTS

The authors of this brief are Ricardo Narvaez, Cooper Wetherbee, and Kyle Blocher.

The authors would like to acknowledge the following professionals for their cooperation and valued contributions including:

- The proponents: Tariye Gbadegesin, Efe Okoh, Ernest Nyarko, Jobalo Oshikanlu, Adaobi Nnorukah and Tobi Edun (ARM-Harith Infrastructure Fund Managers)
- The working group members: Steven Baillie (IFC), Brian Dean (SEforALL), Jonathan First (GFA Consulting), Kome Johnson-Azuara (AFC), Daniel Mueller (InfraCredit), Rick Nogueira (Senior Advisor Pollination), Sarah Zügel (Deutsche BMU)
- Additional expert contributors: Rael McNally (Blackrock), Elif Erkul (TCX), Max Klotz (IFC), John Michael La-Salle (CPI)

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SUMMARY

In the next 30 years Africa’s cities will be home to an additional 950 million people. Decisions made today on how urban infrastructure is built will shape the continent’s carbon footprint for decades to come. However, regional investment in sustainable urban energy and infrastructure projects is constrained by both traditional and climate-specific investment barriers. Project developers lack access to the technical support and financing solutions required to move sustainable infrastructure projects beyond the feasibility stage to financial close, construction, and commercial operation.

The ARM-Harith Cities & Climate Transition Fund (The ACT Fund) is a mid-market greenfield infrastructure fund. The ACT Fund will expand the pipeline of investable sustainable infrastructure projects via a blended currency mechanism that reduces financing friction at early project stages. At the same time, the mechanism de-risks international equity using structured exit solutions that mobilize additional local institutional investors. This will allow The ACT fund to invest in and exit more projects than in a traditional model, developing more high-quality West African climate infrastructure projects.

More specifically, the ACT Fund will:

1. Provide technical assistance to make projects investment-ready;
2. Deploy equity and subordinated debt funds in tandem to finance and build these projects efficiently; and
3. Arrange the exit of hard-currency equity by raising senior debt from local institutions once projects are operational and de-risked.¹

This instrument meets all four of the Lab’s endorsement criteria:

- **Innovative:** Introduces a blended currency mechanism that serves to overcome high transaction costs and lead times while de-risking international equity using structured exit solutions.
- **Financially Sustainable:** Provides strong, risk-adjusted return opportunities for a wide range of investors seeking equity, subordinated debt, and/or senior debt exposure.
- **Catalytic:** The instrument’s blended finance structure can mobilize private capital at an estimated 4.1x multiple on initial funding, with the potential to drive billions in private sustainable infrastructure investment.
- **Actionable:** ARM-Harith is an existing infrastructure fund manager with a solid backing of shareholders and limited partners, with a team with more than 90 combined years of investment experience.

**Next steps:** The immediate next steps for the ACT Fund are to secure project development technical assistance, design stage funding to complete fund establishment, targeting USD 150 million to capitalize the equity fund and USD 100 million for the subordinate debt fund, with plans to start deploying capital in Jan 2023.

¹ Point 2 & 3 make up the “blended currency mechanism” to be explained further in section 1.
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Africa is urbanizing rapidly. Africa’s cities will be home to an additional 950 million people in the next 30 years, yet there is an annual infrastructure funding gap estimated to be between USD 68-108 billion (AFDB, 2018). Decisions made today on how the infrastructure to serve this growth is built will shape the continent’s carbon footprint for decades to come.

Funding infrastructure in developing economies is complex and challenging – even more so when infrastructure is designed and built to align with low-emissions, climate-resilient urban development needs. Although many emerging economies have supportive regulatory frameworks to encourage private participation in sustainable infrastructure investment, commercial funding remains scarce. Financing these projects generally requires multiple providers, complex negotiations, heavy concessional support, and underwriting from public or philanthropic institutions. In short, the private financing available for climate-aligned infrastructure is limited, costly, and time-consuming for project developers to obtain.

Even taking into account the current momentum to “Build Back Better” in the wake of the COVID-19 pandemic, funding needs for crucial climate and development priorities far exceed available funding from international aid agencies, development agencies banks, and other public and philanthropic sources. Therefore, it is critical to unlock and mobilize local, private-sector resources.

Existing infrastructure fund managers can serve as important agents of change by developing innovative solutions that help developers obtain institutional-scale financing for early-stage infrastructure projects, while also supporting these developers’ efforts to verify that these projects are sustainable, resilient, and climate-aligned. At the same time, these infrastructure fund managers can help their current limited partners, such as pension funds and asset managers, learn about the mechanics and benefits of investing in sustainable, climate-friendly infrastructure.
The ACT Fund is designed to mobilize local-currency institutional capital via a blended currency mechanism that de-risks international equity using structured exit solutions.

The ACT fund has three key features:

- Provides technical assistance to project developers.
- Deploys its equity and subordinated debt (sub-debt) funds in tandem to finance and build these projects efficiently.
- Arranges near-term, hard-currency exits for initial equity investors using senior debt issued by local financial institutions.

Figure 1: ACT Fund instrument mechanics

The ACT Fund (A) consists of and manages a technical assistance fund (B), a local-currency sub-debt fund (C), and an equity fund (D). The technical assistance fund (B) will provide project preparation and climate alignment to make projects investment ready.

ARM-Harith, as the fund manager, will deploy the equity fund (D) and local currency sub-debt fund (C) together, potentially alongside ARM-Harith’s existing equity fund (E) to rapidly and efficiently fund projects for development. This deployment of the equity and debt funds in parallel is the first part of the blended-currency mechanism (BCM).

BCM Stage 1 and BCM Stage 2 in the above diagram represent the blended-currency mechanism. This mechanism shortens the time to financial close for each project and streamlines the exit process for project-level equity funding. The mechanism operates in two
stages. In BCM Stage 1, the fund manager draws down from both the USD equity fund and the local currency fund in tandem to cover the majority of the full development and construction costs of a project and get it to operational phase as efficiently as possible. BCM Stage 2 uses local senior debt to release the majority of the equity invested in a project once it becomes operational, effectively resulting in a locally financed project in full commercial operation.

The funds unlocked by the equity release are recycled into the ACT Fund to be redeployed into the next wave of projects, allowing the ACT Fund to invest in and exit more projects than in a traditional fund with a longer equity commitment period.

The initial focus for fund deployment is climate mitigation projects. Applying lessons learned from this initial round of investments, the fund will expand into more technically complex adaptation and resilience projects in subsequent phases. A sample of the preliminary project pipeline can be seen in Annex 1.

The ACT Fund’s three components will be funded by different actors. Funding for the technical assistance portion of the ACT Fund will be obtained from donor governments and philanthropies (F). Local investors will fund the local-currency sub-debt tranche (G), while DFIs will provide the catalytic capital for the USD equity fund (J). During the fund structuring process, ARM-Harith will work with the lead DFI providing catalytic capital to determine whether it is feasible to supplement the DFI’s commitment with commercial capital (H) in the USD equity fund.

2. INNOVATION

The ACT Fund’s unique blended-currency mechanism addresses high transaction costs and lead times, barriers that have constrained the project pipeline in West Africa, while also shortening and simplifying the project exit process to allow efficient redeployment of capital in further projects.

2.1 BARRIERS ADDRESSED: OVERCOMING BOTH TRADITIONAL AND CLIMATE INVESTMENT BARRIERS

2.1.1 TRADITIONAL INVESTMENT BARRIERS

Project developers in the Global South face numerous funding barriers that prevent their projects from reaching financial close. The ACT Fund provides solutions that directly address three of these major barriers, as detailed in the table below.
### Table 1: Overcoming traditional infrastructure investment barriers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Description</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low risk appetite of local investors</td>
<td>Institutional investors in developing economies are generally risk-averse and tend to invest in highly liquid assets as a defensive strategy in response to the high-risk nature of the market(s) in which they operate. Greenfield sustainable infrastructure projects generally present an unacceptable level of risk for these investors, as prior to construction the project’s success is uncertain and steady cash flows are yet to materialize.</td>
<td>The ACT Fund eliminates this risk by taking projects to operational stage before seeking financing from traditional institutional investors. For more aggressive investors willing to take on some amount of construction risk, the ACT Fund’s mezzanine tranche offers higher, quasi-equity level returns. This funding allows projects to reach the operational stage, at which point their risk profile is reduced, unlocking cheaper refinancing from local senior debt providers once stable cash flows are achieved.</td>
</tr>
<tr>
<td>High transaction costs and lead times for project development</td>
<td>In order to reach financial close, traditionally project developers must secure both equity partners and debt providers that have different deal interests and therefore different concerns (upside potential vs. creditworthiness/default risk). The timing of the procurement and construction stages, along with potentially drawn-out investor negotiations, can make project financing unfeasible.</td>
<td>The ACT Fund will take projects from concept through initial financial close and construction into operation, using only its proprietary fund of combined equity and mezzanine investors. Therefore, once feasibility studies and detailed financial modeling are complete, projects that are approved by the ACT Fund’s own investment committee will be financed and constructed with no need for drawn-out negotiations with additional investors.</td>
</tr>
<tr>
<td>FX risks and lack of liquidity for international equity providers</td>
<td>In countries with highly volatile local currencies, long-term hard currency investment is simply not viable for investors, and currency swaps or hedging strategies are often prohibitively expensive.</td>
<td>While the ACT Fund’s equity sub-fund will be exposed to short-term FX risk, the timeline to exit will be compressed. This is a benefit of the fund’s “equity release” feature, through which the equity tranche will exit projects once they are operational. New long-term debt raised from local institutional investors will be used to refinance the projects.</td>
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<tr>
<td></td>
<td></td>
<td>This feature gives ARM-Harith more flexibility to cut losses if a severe FX event occurs. In addition, the ACT Fund is a blended finance solution, with concessional support from a catalytic equity tranche, first-loss protection, or alternate measures to protect commercial investors from downside risk.</td>
</tr>
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### 2.1.2 CLIMATE INVESTMENT BARRIERS

The need to ensure that projects are strictly aligned with positive climate mitigation and adaptation impacts adds an extra layer of complexity in markets where explicitly climate-oriented investment strategies are less common, even if appropriate regulatory frameworks exist to incentivize sustainable finance and development. The fund must demonstrate that climate criteria are prioritized throughout the investment evaluation process in order to
attract financing from international partners with a thematic focus on sustainable investment.

The below table details how the ACT Fund deals with these inter-related barriers.

Table 2: Addressing sustainable finance barriers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Description</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankability of climate projects</td>
<td>Climate-beneficial projects generally have higher upfront costs than status quo “gray” (climate-neutral) or “dirty” (climate-harmful) projects, making it more difficult to attract investment during the planning and development process.</td>
<td>The ACT Fund’s technical assistance component will be crucial to ensure project bankability, with TA funds used to support project developers through the project feasibility and planning phases. For example, the technical assistance facility could support project developers in obtaining project-level blended finance support to attract commercial investment. This project-level de-risking will work together with the fund-level catalytic tranche to bring more high-quality sustainable infrastructure projects to financial close.</td>
</tr>
<tr>
<td>Demonstrable climate benefits of projects</td>
<td>In some cases, project developers lack capacity to identify and report the climate benefit of projects, reducing exposure to and investment from climate-oriented funders.</td>
<td>The TA facility will provide capacity-building support to project developers, helping them integrate climate reporting into their financial and operational procedures, while also refocusing or realigning certain projects to ensure that they meet international funders’ criteria to qualify as climate projects.</td>
</tr>
<tr>
<td>Measurement, reporting, and verification (MRV) infrastructure required to access climate and impact investment</td>
<td>Similar to the above but at fund level, fund managers lack expertise in reporting portfolio climate impacts. Building out internal fund MRV processes will require additional resources and, in most cases, third-party support. This is important because it allows the fund to attract investment from both concessional and commercial investors who have certain climate eligibility criteria that must be met in order to invest.</td>
<td>The technical assistance fund will help develop and strengthen ARM-Harith’s internal climate impact measurement, reporting, and verification processes, enabling the fund to meet thematic investors’ impact and climate criteria.</td>
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</table>

2.2 INNOVATION: DESIGNED SPECIFICALLY TO MOBILIZE LOCAL INSTITUTIONAL INVESTORS, THE ACT FUND COMBINES ALL PROJECT FUNDING PHASES INTO ONE VEHICLE

The ACT Fund approach expands the pipeline of sustainable infrastructure projects in West Africa by combining funding phases—from conception to operation—into one strategy, providing several advantages:

- The instrument leverages sustainable infrastructure financing best practices using the TA fund to better attract and close equity and lender funding;
• Equity and debt funding for all phases is addressed at project conception, eliminating the typical financing risks and transaction costs that occur at pre-construction financial close; and

• The fund significantly reduces debt-service currency risk by ensuring that debt is provided in local currency once projects enter commercial operation.

Compared with existing funds, the ACT Fund offers a highly innovative solution to help widen the pipeline of climate-friendly infrastructure projects and increase the conversion rate from the feasibility and planning phase to financial close and full commercial operation.

The Lab team investigated existing infrastructure funds, both within and beyond the African continent, in search of funds that addressed 100% of funding needed to a project’s operation date within a single vehicle. Only one instrument was found: Climate Investor One, a Lab-endorsed instrument from the 2014-2015 cycle, which is currently managed by Climate Fund Managers.

Given this lack of directly comparable instruments, we expanded the scope of comparison to add the Subnational Climate Finance Initiative (SCF), endorsed by the Lab in 2020 and managed by Pegasus Capital Advisors. Similarly to the ACT Fund, this innovative vehicle specifically targets deployment of climate-beneficial infrastructure at scale and is supported by a technical assistance fund. However, the ACT Fund is differentiated from SCF by its multi-phase refinancing structure and its focus on mitigating currency risk to attract local institutional capital.

Table 3: ACT Fund comparison to similar instruments

<table>
<thead>
<tr>
<th>Similar Instrument</th>
<th>Description</th>
<th>ACT Fund Differentiation</th>
</tr>
</thead>
</table>
| Climate Investor One | Combines three investment funds (development, construction, refinancing) with TA facility to finance RE projects | • ACT Fund refines through local institutional partners rather than controlling dedicated refi fund  
• ACT Fund has wider mandate - beyond RE to transport, EE, adaptation and resilience projects  
• Incorporates early exit feature |
| Subnational Climate Finance Initiative (SCF) | Blended PE fund with first-loss tranche investing in climate infrastructure, supported by TA facility for project sourcing and certification | • ACT Fund structured projects use minimal senior loans which shortens time to operation  
• Incorporates early exit feature  
• ACT Fund focused on West Africa rather than global |

An additional innovative aspect is that, as opposed to other climate-focused vehicles, the ACT Fund’s structure is easily replicable, with the potential to serve as a blueprint for future progress elsewhere. The fund’s unique structure can help fund managers across developing economies to incorporate climate-aligned projects into their investment approach and thereby also introduce these funds’ limited partners to climate-oriented investing via sustainable infrastructure projects.

2.3 CHALLENGES TO INSTRUMENT SUCCESS

The below table summarizes some challenges that ARM-Harith or another fund manager might face when attempting to implement the ACT Fund’s unique blended-currency infrastructure fund model.
Table 4: Challenges to instrument success

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Management Solutions</th>
</tr>
</thead>
</table>
| Project pipeline: There is a risk that the General Partner will not be able to find enough projects and/or enough competent project sponsors with the ability to develop high-quality, climate aligned infrastructure projects. | • Since the general partners are continuously seeking projects for their existing funds, they have already identified a pipeline of projects compliant with the ACT Fund’s mandate (see Table 1, project pipeline).  
• The technical assistance feature will help with project preparation for those projects that need assistance with planning and structuring and/or those not yet fully vetted for climate alignment. |
| Climate funder criteria surpass current GPs standards: ARM-Harith’s mandate is to invest in infrastructure in West Africa, primarily Nigeria. The firm’s intention is to transition from its current general infrastructure investing strategy into more targeted sustainable infrastructure projects with climate benefits. However, this transition may still fall short of the expectations of international climate investors and concessional funders, such as DFIs and multilateral climate funds, which often enforce strict eligibility criteria for climate investment that rule out certain sustainable infrastructure opportunities. | • The general partner has committed to align its internal processes to the requirements needed to meet the needs of climate-focused funders. The technical assistance feature of the fund will support these alignment efforts. |
| Perceived GP conflicts: Possible perception of a conflict of interest for a GP co-investing from separate mezzanine and equity funds. | • During structuring, a portion of the equity fund may be invested into the mezzanine fund in order to align the interests of each fund’s investors.  
• ARM-Harith will establish clear and transparent processes and legal terms that provide clarity to all stakeholders regarding the structuring and practices of the equity and mezzanine fund components of the ACT Fund. |
| Refinancing risk: There is a risk that local institutional investors decline to provide financing once projects are operational, preventing the planned “equity release” that allows the ACT Fund to exit a project and reinvest returns in new projects. | • ARM-Harith will establish and maintain strong relationships with DFIs for refinance guarantee provision (or borrow directly from DFIs to enable equity release if local institutions decline to provide senior debt).  
• ARM-Harith could explore “synthetic local-currency loans” with providers such as TCX and MFX that focus on providing local currency solutions to projects in countries with highly volatile currencies.  
• As a last resort, the fund can explore the possibility for the mezzanine vehicle to issue its own senior debt to enable equity release. |
MARKET TEST AND BEYOND

3. IMPLEMENTATION PATHWAY AND REPLICATION

The ACT Fund will serve as a blueprint for infrastructure fund managers outside West Africa to launch their own sustainable infrastructure vehicles.

ARM-Harith is leading the design and execution of the ACT Fund. Arm-Harith is a joint venture between Asset & Resource Management Holding Company (ARM) Limited, Nigeria’s largest non-bank financial services provider, and Harith General Partners, a leading Pan-African infrastructure fund manager based in South Africa. ARM and Harith between them have approximately USD 3 billion of assets under management. The ARM-Harith joint venture currently has approximately USD 100 million in assets under management and has been operating and investing in energy projects in West Africa since 2015.

ARM-Harith’s goal is to use the ACT Fund to provide its investor base with climate investment experience and education, with an eye toward proving the commercial investment case for sustainable infrastructure as an asset class. Then, they plan to expand their investments in this sector throughout Economic Community of West African States (ECOWAS) countries using subsequent ACT Fund vehicles.

Figure 2: Target geography
The Lab’s assessment is that the ACT Fund, if it is successfully piloted in West Africa, can eventually serve as a blueprint for infrastructure fund managers worldwide to launch sustainable infrastructure funds that contribute to low-carbon, climate resilient urban development in emerging economies. The proponents are strongly committed to this vision of transparency and knowledge sharing to enable replication by other fund managers and to drive global infrastructure investment toward a climate-aligned future.

The ACT Fund, while leveraging ARM-Harith’s network of “traditional” infrastructure investors, will invest exclusively in climate-beneficial infrastructure projects (see Annex 1, Project Pipeline). These may include both utility-scale and distributed solar generation facilities, as well as micro- or mini-grids using a combination of solar and storage. In the longer term, investments in sustainable urban mobility and resilient waste and water systems are under consideration. ARM-Harith’s long-term vision is to organically shift all its funds under management to become climate-compliant, using the ACT Fund as a catalyst to begin this transition.

Implementation of the ACT Fund will begin with first fund establishment and end with subsequent replication as seen in the following implementation timeline.

![Figure 3: ACT Fund implementation pathway](image)

The implementation pathway for this initial fund revolves around two main tasks: Obtaining grant funding for the technical assistance facility, and raising catalytic capital for the USD
equity fund. Once these tasks are accomplished, ARM-Harith will be better able to market investment opportunities in the local-currency sub-debt fund to West African institutional investors.

4. FINANCIAL IMPACT AND SUSTAINABILITY

4.1 QUANTITATIVE MODELING

The ACT Fund’s innovative structure seeks to achieve shorter time to financial close and earlier exit options by sourcing investors whose risk tolerance meets that required early in the development cycle. This reduces the often-lengthy negotiations with senior loan providers.

These sources require higher returns along the capital continuum (i.e., there is a greater allocation of equity and subordinated debt), so in order to analyze the effectiveness of the ACT Fund’s approach, a two-step comparison process was followed, whose results can be seen in Figure 4 below.

For the first exercise, we calculated an illustrative project’s financial results, comparing outcomes achieved under both the ACT Fund mechanism and a more traditional infrastructure fund approach. The project under ACT Fund structuring generated better risk-adjusted returns. This result is driven by the ACT Fund’s earlier exit timeline.

The second analysis, performed at the fund level, introduced an additional ACT Fund advantage, the equity recycling mechanism, which enables capital to be returned to the fund and quickly redeployed. As can also be seen in Figure 4, the equity recycling mechanism allows the ACT Fund to build double the amount of projects and mobilize an additional USD 159 million in local funding into sustainable infrastructure projects over the life of the fund.

Figure 4: Two step approach analysis of ACT Fund versus traditional models

<table>
<thead>
<tr>
<th>Analysis 1: Single project profitability and return comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Years to exit</td>
</tr>
<tr>
<td>IRR</td>
</tr>
<tr>
<td>Equivalent annual annuity (USD)</td>
</tr>
</tbody>
</table>

*IRR = 16% for traditional fund structure when using a more typical buy-and-hold timeline

<table>
<thead>
<tr>
<th>Analysis 2: Fund vs. fund comparison, including capital recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Projects built</td>
</tr>
<tr>
<td>Total capital mobilized (USD)</td>
</tr>
</tbody>
</table>

4.2 PRIVATE FINANCE MOBILIZATION AND REPLICATION POTENTIAL

In order to break down the ACT Fund’s mobilization potential, it is necessary to further understand its blended currency mechanism feature.
As stated in the instrument mechanics section (Section 1), the blended-currency mechanism (BCM) operates in two phases. Figure 5 illustrates how the BCM works at the project level. First, there is a parallel drawdown of both the hard currency and local currency sub-debt funds in order to get a project operational (Phase 1 of the BCM). After commercial operation date, the project’s value increases as construction risk is overcome and the project begins to generate steady cashflows. Once the project is fully de-risked and operational, the ACT Fund arranges a project refinancing, using local-currency senior debt, enabling an equity release of the hard-currency portion of the project’s capital structure (Phase 2 of BCM) which accomplishes the goal of having a majority locally financed project.

**Figure 5:** Blended currency mechanism’s mobilization of local capital at project level

In Figure 6 below, we assume that all capital in the equity fund is deployed, showing hard-currency equity from catalytic capital providers mobilizing local currency sub-debt on a 1:1 basis in the initial investment phase. This in turn mobilizes the local senior debt at the refinancing phase, which together with the initial investment mobilizes at a ratio of 2.2:1. Mobilization multiples increase as the equity released is recycled into the fund and redeployed into further projects.
These numbers are indicative, but they illustrate the overall concept behind the ACT Fund: Strategically deploying equity investment to develop projects through the riskiest stages (planning → construction → beginning of commercial operation) and then refinancing once projects are operational. This approach allows for the same pool of initial capital to circulate continuously, originating more high-quality projects that each mobilize additional local currency private financing, driving a virtuous cycle of scale and project development.

Using the above as guidance, if the ACT Fund and similar replications were implemented in 10 developing economies by an estimated 3 infrastructure fund managers in each country, the instrument would have the potential to mobilize USD 6.25 billion worldwide in a 10-year period.

5. ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACT

The ACT Fund model allows fund managers to potentially double their impact across multiple SDG outcomes.

5.1 ACT FUND’S DIRECT IMPACT TARGETS

The initiative is targeting the following direct environmental and social impact across the investment portfolio:

The ACT Fund’s investments, at first instance, aim to sustainably expand the share of renewable energy in the region. Subsequently, the ACT Fund aims to more directly target
climate-focused water infrastructure, waste management and public transportation to reduce the per capital environmental impact. These activities will support positive economic, social and environmental links between urban, peri urban and rural areas. This will contribute to a per capita growth of GDP achieved through improved access to electricity, movement of goods and services, digital growth, and improved health. It is also important to note that due to the vast infrastructure needs of the region, having a cleaner energy mix, as these projects get built, will allow energy optimization for these future projects and reduce the carbon footprint more broadly.

5.2 INDIRECT IMPACT

In addition to the direct impacts detailed above, the ACT Fund also generates indirect environmental and social impacts through its investments.

ACT Fund investments will create jobs and strive to ensure equity in access to economic resources. Investments in waste and water infrastructure will improve health outcomes. In addition, the ACT Fund will support effective participation of women in the consultation process of the projects it serves. Finally, there are vast opportunities for climate-smart urbanization in West Africa that can bring investments such as energy efficient data centers, fiber networks, efficient cold chains, and water solutions in peri urban and rural agriculture to support food systems linked to urbanization needs.

5.3 IMPACT OF SUSTAINABLE CITIES

The Lab’s sustainable cities instruments have historically strived to address market barriers and support the deployment of climate solutions in cities in developing countries. Such solutions may fall into the categories of energy efficiency, clean energy, low-carbon transport, and/or other sectors. The ACT Fund aims to finance urban climate infrastructure solutions with an initial focus on renewable energy, eventually expanding to urban mobility, water, and waste. The ACT Fund’s technical assistance facility will empower project developers to build the capacity required to develop these much-needed projects in a sustainable way, avoiding lock-in of long-lived traditional infrastructure projects that are not aligned with cities’ climate mitigation and adaptation needs.

NEXT STEPS

ARM-Harith has a well-developed plan to implement the ACT Fund. Its experience as an established infrastructure fund manager means the organization is well-prepared to facilitate setup and attract investors. ARM-Harith needs to raise donor funding to support
project pipeline projects to get investment ready, as well as to design and set up the fund in accordance to climate investment principles.

The immediate next steps for ACT Fund’s setup and launch are:

1. Secure design-stage and technical assistance grants to advance expanded project pipeline investment and get them climate ready
2. Attract anchor investor(s) for the catalytic hard-currency equity tranche
3. Establish fund and reach initial financial close on capital commitments from LPs investing in subordinated debt fund
4. Use the fund to begin investing in projects in the current pipeline, while continuing to identify additional investment opportunities in line with the fund’s climate criteria
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ANNEX I.

The proponents have identified a pipeline of 10+ projects for the ACT Fund first deployment stage. A sample of this preliminary project pipeline can be seen in Table 6 below. ARM-Harith plans to primarily prioritize climate mitigation projects for the fund’s first iteration. Applying lessons learned from this initial fund deployment, the fund will expand into more technically complex adaptation and resilience projects in subsequent deployments and/or funds (i.e. ACT Fund 2). This proposed strategy is detailed explained in Section 3.

Table 6: ACT Fund Preliminary Project Pipeline

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Sector</th>
<th>Country</th>
<th>Description</th>
<th>Ticket Size (in US$m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunray</td>
<td>Solar-EaaS</td>
<td>Nigeria</td>
<td>Commercial and industrial solar energy solutions for industrial clients (energy as a service).</td>
<td>10</td>
</tr>
<tr>
<td>North Star</td>
<td>Solar-PV</td>
<td>Nigeria</td>
<td>Subnational Solar PV Project In Northern Nigeria</td>
<td>10</td>
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<tr>
<td>Orion</td>
<td>Solar-Minigrid</td>
<td>Nigeria</td>
<td>Renewable Energy Multiple MiniGrid Asset Company</td>
<td>10</td>
</tr>
<tr>
<td>Gongola</td>
<td>Solar PV</td>
<td>Nigeria</td>
<td>Originally utility scale, currently being re-purposed into industrial and sub-national renewable energy</td>
<td>25</td>
</tr>
<tr>
<td>Waterfall</td>
<td>Solar PV</td>
<td>Ghana</td>
<td>An utility scale renewable energy project for the development of Govt. Power Authority’s 50MW Solar Farm</td>
<td>15</td>
</tr>
<tr>
<td>Pluto</td>
<td>Solar PV</td>
<td>Ghana</td>
<td>Expansion of existing project</td>
<td>15</td>
</tr>
<tr>
<td>Westwing</td>
<td>Solar PV</td>
<td>Guinea</td>
<td>Greenfield utility-scale solar power project to generate 82.5MW of clean, reliable, and affordable energy for Guinea. Being supported by German government under Compact Africa</td>
<td>25</td>
</tr>
</tbody>
</table>

Total 110