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| Title: UK Climate Investments (UKCI) | | |
| Programme Value: £200m | | Review Date: December 2018 |
| Start Date: June 2015 | End Date: November 2019 | https://aidstream.org/files/documents/UKCI-business-case-2018-01-15-20180308030342.pdf |

Annual Review - Summary Sheet (1-2 pages)

Summary of Programme Performance

| Year | June 2015 - Nov 2016 | Dec 2016 - Nov 2017 | Dec 2017 - Nov 2018 |
|-----------------|----------------------|---------------------|---------------------|
| Programme Score | B | B | B |
| Risk Rating | Major | Major | Major |

Summary of progress and lessons learnt since last review

This Annual Review reports against progress made between 1 December 2017 and 30 November 2018. This is the third Annual Review for UK Climate Investments (UKCI) and the pilot's third B scoring – outputs have moderately not met expectations.

The achievement of headline results remains behind original expectations due to the residual impact of early underperformance, delays incurred by the Green Investment Bank privatisation in 2017 and the challenges in completing UKCI eligible deals in fast-changing emerging markets. The low volume of deals is reflected in a lower volume of results for megawatts (MW) installed and private finance mobilised. However, the pace, quality and diversity of deal activity has consistently improved under Macquarie's management. This is reflected in a pipeline of near-term investment opportunities which address UKCI Investment Mandate requirements for additionality, transformational change, poverty reduction, sector mix and geographical coverage. BEIS expects £160m to be committed to at least seven high-quality projects by November 2019 (cumulatively) and for this to translate into a higher volume of headline results.

UKCI saw its first investment become fully operational during this reporting period. Project Bolt, a 50MW utility-scale solar project in Maharashtra, is now exporting power to the grid. UKCI completed its second deal in August 2018, Project Lakeside. This is a ~£30m cornerstone investment in India's first unlisted renewable yield company (or yieldco) for international investors. This is an innovative refinancing vehicle which, amongst other benefits, releases capital for further investment in renewable energy assets. This is expected to expand the depth and breadth of the Indian renewables market and deliver significant climate and economic impacts. Project Lakeside is explained in more detail on page 10.

UKCI did not complete any investments in Africa over this reporting period. The challenges and opportunities for UKCI in African markets were presented in a strategy paper in November 2018. BEIS expects UKCI to announce its first investment in sub-Saharan Africa in Quarter 1 2019

The high frequency of origination activities, participation in promotional activities and association with Macquarie's global reputation is earning UKCI a stronger international network. However, UKCI's visibility remains behind original expectations due to the slow rate of deal completion.

In November 2018, BEIS extended the UKCI investment period by an additional 12 months to realise the near-term pipeline of expected results. This extends the pilot end-date to November 2019. This decision was informed by the recommendations of the independent interim evaluation and the improvements seen in deal completion, communication and reporting under the pilot's new management. This

demonstrates the time required to set-up a new vehicle with a differentiated investment strategy, complete complex deals and deliver results – a key lesson of the pilot to date.

BEIS maintains a high level of oversight over UKCI given its high value and unique delivery model. Continued representation at the UKCI Board and Investment Committee means the UK Government is closely involved in the pilot's strategic governance and the scrutiny of investment opportunities. Future programming options will need to be based on a robust analysis of UKCI costs and results.

Summary of recommendations for the next year

R1: BEIS and Macquarie to review the logframe and agree milestones for the remaining pilot period. Headline targets agreed by April 2019. Modelling complete by June 2019.

R2: BEIS and Macquarie to agree actions to further promote UKCI awareness and visibility. Plans in place by May 2019.

R3: BEIS and Macquarie to continue regular discussions about the status of the project pipeline, the mix of transaction types/sectors/geographies and delivery against the mandate.

R4: BEIS and Macquarie to agree a process for managing financial returns from investments once the planned investment period expires. Plans agreed by May 2019.

R5: BEIS to review future programming options beyond the current UKCI investment period. BEIS to review next steps by June 2019.

R6: BEIS and Macquarie to agree how to increase investment in energy efficiency projects over the remaining pilot period in line with mandate expectations. Plans in place by May 2019.

R7: BEIS to define objective value for money performance indicators. Indicators agreed by May 2019.

A. Introduction and Context (1 page)

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|---|---|
| Link to Business Case: | https://aidstream.org/files/documents/UKCI-business-case-2018-01-15-20180308030342.pdf |
| Link to Log frame: | N/A |
| Link to previous Annual Review (if appropriate) | https://aidstream.org/files/documents/UKCI-Annual-Review-2017-20181019111040.pdf |

Outline of the programme

UK Climate Investments (UKCI) is a joint venture between the Green Investment Group, now part of Macquarie, and the UK Government Department for Business, Energy and Industrial Strategy (BEIS). UKCI invests in renewable energy and energy efficiency projects across sub-Saharan Africa and India to demonstrate that low carbon development is possible, replicable at scale, commercially viable and capable of lowering carbon emissions and supporting economic growth. The fund (£200m of UK International Climate Finance) provides late-stage minority equity investments on a commercial basis to get projects off the ground that would not otherwise reach financial close. UKCI delivers development outcomes consistent with the conditions of UK Overseas Development Assistance.

UKCI was originally set up as a three-year joint venture (2015-2018) with the Green Investment Bank (GIB). Since the privatisation of the Green Investment Bank and its acquisition by the Macquarie group in September 2017, BEIS has extended the investment period to November 2019 to account for the delays resulting from the privatisation and realise the pipeline of expected results.

B: PERFORMANCE AND CONCLUSIONS (1-2 pages)

Annual outcome assessment

UKCI is not achieving outcomes expected at this point in the programme. This is attributable to the delays in deal completion described throughout this Annual Review. BEIS and Macquarie should set realistic expectations about what outcome-level results can be achieved during the remaining pilot period.

The investment completed during this reporting period, Project Lakeside, only contributes results to a limited number of outcome indicators. This is because the UK Government takes a robust and conservative approach to which results it reports, only counting those which have clear evidence of attribution to UK funds. References are made to these indirect results to demonstrate the wider benefits of the UK's investment in this project. BEIS should consider how to better capture the impacts of investments such as Project Lakeside as part of the logframe review and ongoing evaluation activities.

Net figures and gross figures are referred to throughout the Annual Review. A 100% additionality assumption is applied for Output Indicators and a 50% additionality discount for Outcome Indicators. This is consistent with the additionality test presented in the UKCI Business Case. The economic modelling reflects this assumption.

Additionality is the determination of whether an intervention has had an effect compared to a baseline. The 'additional' impact is classed as the net impact between the 'do-something' scenario (with an intervention) and a 'do-nothing' scenario (without an intervention). Gross figures refer to all of the results associated with an investment. Net results refer to the results that are considered to be additional.

100% UK ICF attribution is applied for all ICF Key Performance Indicators (KPIs), as the UK is the sole donor.

Outcome 1.1: Net Change in Greenhouse Gas Emissions (tCO₂e) – tonnes of GHG emissions reduced or avoided by UK Climate Investments portfolio (ICF KPI 6) (in-year)

Target (in-year): 2.6 MtCO₂ (net)
Achieved (in-year): 0.03 MtCO₂ (net)

Project Bolt avoided 52,885 tCO₂ (gross) and 26,443 tCO₂ (net of additionality) during this reporting period. The project has also contributed towards improved air quality through the annual avoidance of nitrous oxide, sulphur oxide, Particulate Matter (PM) 10 and PM 2.5 emissions.

Although not directly attributable to UKCI funding, the solar assets underlying Project Lakeside avoided 332,247 tCO₂ (gross) and 166,124 tCO₂ (net of additionality) over this reporting year.

Outcome 2.1: Total number of direct jobs created by UK Climate Investments projects (ICF KPI 5) (in-year)

Target (in-year): 1248 jobs (direct in construction and operation, net)
Achieved (in-year): 68 jobs (direct in construction and operation, net)

UKCI has supported 135 full-time equivalent jobs over this reporting period in gross terms. These have accrued from the operation of Project Bolt since deal completion in October 2017. 119 jobs have been created in construction and 16 in operations and maintenance. The company responsible for development, asset management and operations have established a permanent operations and maintenance team to oversee this project and its wider portfolio. Indirect job creation has been supported through the supply of affordable and reliable electricity to local businesses and emerging enterprises.

The volume of jobs created from Project Bolt is slightly behind original projections per deal. This is because the project value, MW installed, and MWh delivered are lower than that projected for an average UKCI deal.

Although not 100% attributable to UKCI, the solar assets underlying Project Lakeside employ 277.1 full-time equivalent employees.

Outcome 3.1: Average (expected) Internal Rate of Return to each UKCI investment (e.g. projects that reach commissioning stage) (IRR calculated in GBP) (in-year)

Target (in-year): 8%
Achieved (in-year): Commercially sensitive.

The projected Internal Rate of Return for Project Lakeside is broadly in line with the target, allowing for market movements in forex and interest rates. The rate of return was reviewed by the UKCI Investment Committee and considered acceptable.

Outcome 3.2: Average speed of implementation between project conceptualisation and project implementation (in-year)

Target (in-year): 7 months
Achieved (in-year): 8 months

Project Lakeside was presented to the Investment Committee as a white paper on 4 October 2017 and signed on 7 June 2018, an eight-month period. Completion took slightly longer than expected due to delays in finalising the senior debt arrangements.

Overall output score and description

UKCI scored a B for this Annual Review i.e. outputs have moderately not met expectations. Progress against Output 1 is broadly on-track. This reflects an increase in origination activity and a strong number

of projects presented to the UKCI Investment Committee. Progress against Output 2 is off-track, a reflection of the lack of completed investments and associated mobilisation of private and public finance. Progress against Output 3 is slightly off-track. This reflects the lack of completed energy efficiency projects and installed capacity which can be attributed to UK funding.

Key actions

See recommendations captured beneath each Output score.

Has the logframe been updated since the last review?

The logframe underwent a thorough review process, starting in August 2018. The changes are summarised below. The amendments were agreed between BEIS Policy, Analytical and Programme Management Teams and key personnel in Macquarie.

BEIS and Macquarie will need to update the logframe for the remaining project period to ensure it remains consistent with the logic of the pilot design, current investment climate and presents stretching yet realistic targets. BEIS should also consider testing the pilot's Theory of Change for any changes in casual pathways, assumptions and evidence since it was last reviewed.

Output Ordering:

- The outputs have been reordered to logically follow the project investment cycle from origination/promotion (Output 1), to investments made/finance mobilised (Output 2), and infrastructure installed (Output 3).

Outcome 3: Decreased Cost of Capital; and Outcome 3.1: Reduced Cost of Capital to Similar Projects

- This Outcome and Outcome Indicator have been removed from the logframe but will remain an element of the pilot's independent evaluation. The indicator was removed due to the complexity of measuring and attributing changes in the cost of capital to UKCI investments across a variety of markets. The evaluation will assess how the programme is transforming investment environments through project-level case studies, policy and investment community interviews plus a desk review of market conditions and the financing landscape.

Outcome 3.1: Average (expected) returns on investment to the vehicle since the UKCI pilot began e.g. projects reached commissioning stage

- This indicator has been redefined as: Average (expected) Internal Rate of Return (IRR) to each UKCI investment e.g. projects that reach commissioning stage (IRR calculated in GBP).
- IRR was considered a more accurate and standard industry metric than average (expected) returns. This is calculated using £GBP to allow comparison between projects and ensure consistency with the currency of resources inputted to the programme.

Outcome 3.2: Average speed of implementation between lead generation and project implementation

- This indicator has been redefined as: Average speed of implementation between project conceptualisation and project implementation.
- This period has been defined as the time between the presentation of a white paper and signing a deal.

Output Indicator 1.2: Number of meetings with stakeholders in project origination (potential project investors and project developers)

- This indicator has been redefined as: Number of project origination meetings with stakeholders (potential project investors, project developers or their financial advisers).

Output 1.3: Number of meetings with stakeholders promoting UKCI and GIB overseas

- This indicator has been redefined as: Number of meetings with stakeholders promoting UKCI.
- 'Promoting GIB overseas' was no-longer considered valid a measure of performance post-privatisation.

Output Indicator 1.4: Number of projects in the pipeline that reach Investment Committee at red paper stage

- This is a new indicator. This was introduced to measure the progress made in advancing deals beyond conceptual stages. It was decided to record the presentation of red papers rather than amber papers as it is not uncommon for projects to skip the amber stage i.e. leapfrog from red to green.

Output Indicator 2.1: Number of investments completed by the fund; and Output Indicator 2.2: Volume of capital invested by the fund

- The number of investments and volume of capital were previously captured in a single indicator. They have since been separated to more clearly monitor progress against project completion and capital deployed.

Output Indicator 3.1: Level of installed capacity of clean energy as a result of UKCI investment in the project (MW) (ICF KPI 7)

- Progress against this indicator will be measured according to actual results achieved rather than expected lifetime.
- Actual results were not weighted in the 2015/16 or 2016/17 Annual Reviews to account for the time-lag between investment close, construction and operation. Actual results are now measured considering the age of the pilot.

Output Indicator 3.2: Electricity demand reduction (MWh) resulting from UKCI investments (ICF KPI 16)

- This indicator has been redefined as: Electricity demand reduction (MWh) resulting from UKCI Energy Efficiency projects (ICF KPI 16).
- Progress will be measured according to actual results rather than expected lifetime. Actual results were not weighted in the 2015/16 or 2016/17 Annual Reviews to account for the time-lag between investment close, construction and operation. Considering the age of the pilot, we are now expecting actual results for MWh saved.

Impact Weightings:

- All impact weightings remain unchanged from the 2016/17 Annual Review.

Modelling:

- Logframe milestones have been modelled using data compiled by BEIS and Macquarie. Data from the original Business Case has been pro-rated to reflect implementation delays where relevant. BEIS expects to be less involved in results modelling as Macquarie become more familiar with this approach.
- BEIS and Macquarie need to agree stretching yet realistic targets for the 2018/19 reporting year following the agreed extension period. This should reflect expectations about the profile of expected investments and the remodelling of expected lifetime results. This process should start with an expectation setting meeting between all parties in Quarter 1 2019.

Recommendation 1 (R1): BEIS and Macquarie to review the logframe and agree milestones for the remaining pilot period. Headline targets agreed by April 2019. Modelling complete by June 2019.

C: DETAILED OUTPUT SCORING (1-2 pages per output)

| | | | |
|--|---|---|----------|
| Output Title | <i>Strong international network established (for both deal origination and effective dissemination)</i> | | |
| Output number per LF | 1 | Output Score | A |
| Risk rating (Minor, Moderate, Major or Severe) | Major | Impact weighting (%): | 20% |
| Risk revised since last AR? | No. | Impact weighting % revised since last AR? | No. |

| Indicator(s) | Milestones from Logframe | Progress |
|--|---------------------------------|--|
| <i>1.1. Number of people accessing information from UKCI's website on the international pilot disaggregated by geography (in-year)</i> | <i>7825 (in-year)</i> | <i><u>Not achieved</u> 6,259 (in-year) 80,373 (cumulative)</i> |
| <i>1.2. Number of project origination meetings with stakeholders (potential project investors or project developers) (in-year)</i> | <i>300 (in-year)</i> | <i><u>Surpassed</u> 358 (in-year) 562 (cumulative)</i> |
| <i>1.3. Number of meetings with stakeholders promoting UKCI (in-year)</i> | <i>14 (in-year)</i> | <i><u>Surpassed</u> 18 (in-year) 30 (cumulative)</i> |
| <i>1.4. Number of projects in the pipeline that reach Investment Committee at red paper stage (in-year)</i> | <i>6 (in-year)</i> | <i><u>Surpassed</u> 8 (in-year) Cumulative N/A</i> |

Output Indicator 1.1. Number of people accessing information from UKCI's website

Progress against this indicator is behind expectations. The UKCI website received 6,259 unique hits during this reporting period, a 12% decline on 2017. Approximately 42% of visits were from the UK, 9% from India, 8% from the US, 3% from Australia, 2% from South Africa, 2% from France and 33% from other countries. The results demonstrate that visibility and international recognition remain a challenge. This was also observed in the UKCI independent interim evaluation. BEIS and Macquarie should consider how to build further brand awareness, particularly in UKCI target geographies.

BEIS and Macquarie should consider establishing a baseline for this indicator which provides a more accurate benchmark of success e.g. how the number of UKCI website hits compares against other similar funds. The current baseline is based on hits recorded during the 2016-17 reporting period. This baseline is unnaturally high as the Green Investment Bank privatisation caused a unique peak in website interest.

R2: BEIS and Macquarie to agree actions to further promote UKCI awareness and visibility. Plans in place by May 2019.

Output Indicator 1.2. Number of project origination meetings with stakeholders

Progress against this indicator has surpassed expectations. The UKCI Deal Team held 358 meetings with potential project investors, project developers or their financial advisers during this reporting year, 75% more activity than 2017. This reflects a strong increase in engagement with a range of market actors including investors, lenders, developers and advisers. Missions to Mauritius, South Africa, Kenya, Rwanda, Ghana, Nigeria, Saudi Arabia and India have been supplemented with calls and virtual meetings from London.

This activity has addressed the lack of permanent staff in Africa, cultivated a strong network of contacts and built a 12-month pipeline of investment opportunities. Macquarie should continue to ensure that the frequency of overseas business trips does not compromise other operational commitments e.g. the timely preparation of Board and Investment Committee papers.

Output Indicator 1.3. Number of meetings with stakeholders promoting UKCI

Progress against this indicator has surpassed expectations. The UKCI Deal Team has regularly participated in meetings, sector-specific events and external facing engagements to improve UKCI awareness and visibility.

18 meetings took place where brand promotion was the main objective. Notable events include the Africa Investment Exchange, the Women in Infrastructure Forum and the UK-India Green Finance Working Group (chaired by the UKCI Managing Director). This regularity of engagement should continue throughout the next reporting period. As discussed under Output Indicator 1.1, there remains uncertainty over the extent to which the UKCI brand has international recognition. This issue will be addressed further in the pilot evaluation.

Output Indicator 1.4. Number of projects in the pipeline that reach Investment Committee at red paper stage

This is a new indicator for this reporting period. The indicator aims to measure the level of positive deal origination activity by recording the volume of deals which progress beyond the white paper stage. A white paper provides the UKCI Investment Committee with a preliminary overview of an investment opportunity. If approved, a red paper is prepared to provide a more in-depth analysis of the transaction structure, investment returns, development impact, and case for transformational change and additionality. Red papers are considered an adequate marker of deal origination because they present a serious case for investment. Amber papers tend to provide a level of deeper analysis before the project's final proposition is presented as a green paper. There are many factors which may prevent a deal from progressing beyond the red paper stage. These include issues in deal structuring, commercial outcomes or risks beyond BEIS and Macquarie's tolerance.

Progress against this indicator has surpassed expectations. Eight projects were presented to the Investment Committee at red paper stage over this reporting period. This included five projects from Sub-Saharan Africa and three from India. September - October 2018 saw a peak in the number of red papers presented to the Investment Committee, demonstrating a steady improvement in deal activity. Three red papers are expected to be presented to the Investment Committee in the first quarter of 2019, with five expected in quarter two.

| | | | |
|--|---|---|----------|
| Output Title | Private and public investment mobilised directly by UK Climate Investments fund | | |
| Output number per LF | 2 | Output Score | C |
| Risk rating (Minor, Moderate, Major or Severe) | Major | Impact weighting (%): | 50% |
| Risk revised since last AR? | No. | Impact weighting % revised since last AR? | No. |

| Indicator(s) | Milestones from Logframe | Progress |
|---|---------------------------------|---|
| 2.1. Number of investments completed by the fund (in-year) | 3 (in-year) | <u>Not achieved</u> 1 (in-year) 2 (cumulative) |
| 2.2. Volume of capital invested by the fund (in-year) | £50m (in-year) | <u>Not achieved</u> ~£30m (in-year)* The exact amount is currently commercially confidential. The exact figure will be public when UKCI LLP statutory accounts are published in Dec 2019. This also impacts the cumulative result shown below. ~£35 (cumulative) |
| 2.3. Volume of public finance mobilised for climate change purposes as a result of UK Climate Investments portfolio (ICF KPI 11) (in-year) | £26m (gross, in-year) | <u>Not achieved</u> £0 (gross, in-year) £0 (cumulative) |
| 2.4. Volume of private finance mobilised for climate change purposes as a result of UK Climate Investments portfolio (ICF KPI 12) (in-year) | £133m (gross, in-year) | <u>Not achieved</u> £107m (gross, in-year) £140m (cumulative) |
| 2.5. Number of private and public sector investors across UK Climate Investments portfolio (in-year) | 9 (in-year) | <u>Not achieved</u> 2 (in-year) 4 (cumulative) |

Output Indicator 2.1: Number of investments completed by the fund

Progress against this indicator is behind expectations. UKCI completed one investment during this reporting period, Project Lakeside. This deal closed in August 2018 and marked UKCI's second investment in total. This is explained in more detail below. The target for this reporting period was based

on the UKCI Deal Team's 12-month Delivery Plan presented to the Board in December 2017. This forecast the completion of up to four deals between December 2017 and November 2018. The pilot is also behind the cumulative number of investments expected at this point in the programme.

The pilot's limited deal flow can be attributed to changing conditions in target markets and the time required to identify and progress UKCI eligible projects. Investment challenges include the increasing prevalence of other Official Development Assistance (ODA) lenders, the limited range of transformative projects within the investment value limit and a narrowing space for UKCI as a late-stage investor (investing in projects where there is demonstrated viability rather than the early development of a new initiative).

BEIS and Macquarie have worked closely to agree investment strategies which address these market challenges and satisfy the mandate. The UKCI Board agreed an investment strategy for Africa in November 2018. A refreshed India strategy will be presented in December 2018. The UKCI Board has signalled willingness to overcome limits to investment by considering a variety of different deal opportunities where there is a clear and convincing case. For instance, opportunities to participate in earlier-stage project development, invest alongside other ODA funded debt or consider higher value opportunities (£30-50m).

The current medium-term pipeline of deals includes 21 projects (12 in Africa, nine in India) spanning wind, solar, small-scale hydro, geothermal, biomass and energy efficiency. BEIS expects UKCI to complete at least two new deals in early 2019, including the first investment in Africa. BEIS and Macquarie regularly discuss updates to the pipeline of prospective deals. These communication flows should continue to ensure alignment with the mandate and the timely mobilisation of resources for deal completion.

UKCI has completed two investments since the pilot began, Project Bolt and Project Lakeside. Project Bolt is explained in more detail in the 2016-17 Annual Review. Project Lakeside is a ~£30m investment in India's first renewable yield company (or yieldco) for international investors. A yieldco is a company or financial structure created to refinance operating assets that have predictable cashflows from long-term contracts. Project Lakeside is a renewable yieldco with a range of underlying solar photovoltaic (PV) assets (185MW) generating and selling electricity at a fixed price via a 25-year contract with the Government of India. For investors, a yieldco provides predictable cashflows and a high likelihood of stable returns (yields). For project developers (those that build and sell the assets), the funds raised from the investments can be used to pay off debt and/or free up capital to build even more renewable projects.

Growing attention will be paid to asset management as Project Bolt, Project Lakeside and other UKCI investments mature. BEIS and Macquarie need to agree an approach for managing financial returns including sell-offs of investments up to and beyond the current investment period.

R3: BEIS and Macquarie to continue regular discussions about the status of the project pipeline, the mix of transaction types/sectors/geographies and delivery against the mandate.

R4: BEIS and Macquarie to agree a process for managing financial returns from investments once the planned investment period expires. Plans agreed by May 2019.

Output Indicator 2.2: Volume of capital invested by the fund

Progress against this indicator is behind expectations. UKCI invested ~£30m over this reporting period into one initiative, Project Lakeside. The target for this reporting period was based on the UKCI Deal Team's 12-month Delivery Plan presented to the Board in December 2017. This forecast £50m of investments by end-April 2018. The factors limiting deal flow relate to changing market conditions and the requirements of the UKCI Investment Mandate, as summarised under the previous Output Indicator. Macquarie will present a 12-month Delivery Plan to the UKCI Board in December 2018 to outline the number and volume of investments expected over remainder of the pilot period.

The UKCI Business Case expected the majority of funds to be committed to projects by the end of the initial three-year investment period (May 2018). However, only ~£35m has been invested to date. Material external factors, largely the delays caused by privatisation and market conditions in the original priority countries in Africa, have required BEIS to extend the period over which these results can be achieved. The pilot period has therefore been extended by 12 months to November 2019. This extension is expected to realise near-term results and capitalise on the improvements in fund management seen under Macquarie.

BEIS expects to see a strong improvement in the number of investments made and volume of funds invested over the remaining pilot period. The future of UKCI should be informed by an analysis of different delivery models, value for money assessment, early evaluation findings and departmental priorities.

R5: BEIS to review future programming options beyond the current UKCI investment period. BEIS to review next steps by June 2019.

Output Indicator 2.3: Volume of public finance mobilised

Progress against this indicator is behind expectations due the lack of completed deals. No public finance was mobilised during the completion of Project Lakeside. The Government of India acts as the off-taker for this project but was not expected to be a co-investor. Cumulatively, the volume of public finance mobilised has been lower than expected. This is because investments in renewable energy projects have been made on commercial or near-commercial terms which require less public support.

2.4. Volume of private finance mobilised for climate change purposes as a result of UK Climate Investments portfolio

Progress against this indicator is moderately behind expectations. Project Lakeside mobilised £107m of private finance, 69% of which includes equity commitments from an international bank and 8% of which includes debt from a multinational banking and financial services corporation. The deal structure used mobilised the greatest volume of private investment feasible. For every £1m of ODA invested, Project Lakeside mobilised £3.3m.

As a yieldco, Project Lakeside has the potential to channel private capital into the renewables market in several ways. Firstly, the vehicle will free-up capital which the developer selling and releasing the funds can reinvest in new renewable projects. Secondly, the yieldco creates a secondary market for assets which gives developers confidence they can sell them on and build more projects. The availability of other sources of funding, including supplier credit, also gives developers reassurance they can exit after construction. Project Lakeside therefore has the potential to increase the number and type of developers and financiers for new renewable projects, thus increasing competition, reducing financial costs and lowering prices. BEIS should consider how to capture the impact yield companies and other financial vehicles have on developing secondary markets as part of the logframe review and ongoing evaluation activities.

2.5. Number of private and public sector investors across UK Climate Investments portfolio

Progress against this indicator is behind expectations due to the lack of completed deals. Project Lakeside mobilised two private sector investors, an asset management firm and a multinational bank. On a per-deal basis, this is in-line with expectations.

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|--|--|---|----------|
| Output Title | <i>Renewable energy and energy efficiency measures are installed</i> | | |
| Output number per LF | 3 | Output Score | B |
| Risk rating (Minor, Moderate, Major or Severe) | Major | Impact weighting (%): | 30% |
| Risk revised since last AR? | No. | Impact weighting % revised since last AR? | No. |

| Indicator(s) | Milestones from Logframe | Progress |
|---|---|--|
| <i>Level of installed capacity of clean energy as a result of UKCI investment in the project (MW) (ICF KPI 7) (in-year)</i> | <i>136.8 MW (gross, in-year)</i> | <u><i>Not achieved</i></u> <i>50 MW (gross, in-year)</i> <i>50 MW (cumulative)</i> |
| <i>Electricity demand reduction (MWh) resulting from UKCI Energy Efficiency projects (ICF KPI 16) (in-year)</i> | <i>5.2 million MWh (gross, in-year)</i> | <u><i>Not achieved</i></u> <i>0 MWh (gross, in-year)</i> <i>0 MWh (cumulative)</i> |

Output Indicator 3.1: Level of installed capacity (MW)

Progress against this indicator is behind expectations due to the limited number of completed deals. UKCI has installed 50MW of generation capacity during this reporting period. This is supplied solely by Project Bolt which became operational in June 2018 and is therefore captured in this reporting period.

Even though installed capacity is lower than expected, Project Bolt slightly surpasses the average installed capacity expected from each deal. The project has also delivered a range of important indirect energy access benefits. The Output therefore scores a B – performance has moderately not met expectations.

Project Bolt is expected to provide affordable clean electricity for approximately 20,000 homes throughout Maharashtra region where retail power costs are amongst the highest in India. The project is connected to the local distribution grid and provides electricity to homes and businesses in a remote region. The project demonstrates that solar power is financially viable in an area traditionally fed by thermal and wind generation. The developer has intentions to build upon this partnership and construct approximately 300MW of solar photovoltaic projects in India.

UKCI's investment in Project Lakeside saw the acquisition of a 40% ownership interest in a 185 MW portfolio of operating solar asserts in India. However, as these assets are pre-existing, they cannot count towards UKCI results. The sponsor expects to commission a further 250MW in solar PV assets over the next 12 months.

UKCI is expected to make strong progress against this indicator in 2019 as new renewable energy investments are scheduled for completion in Quarter 1.

Output Indicator 3.2: Electricity demand reduction (MWh)

Progress against this indicator is behind expectations due to the lack of relevant investments. Only electricity savings from energy efficiency projects contribute towards this indicator. No energy efficiency projects have been completed during this reporting period.

Deals in this sector have been more difficult to identify due to a range of market challenges in UKCI target geographies. Issues have included market fragmentation, limited commercial incentives and the complex nature of transactions in this field. This is particularly relevant to nascent markets in sub-Saharan Africa.

The UKCI Deal Team have developed a pipeline of energy efficiency related projects spanning waste-to-energy, green buildings and low-emission vehicles. Several energy efficiency projects have been presented to the UKCI Investment Committee but have been slow to progress due to financial and legal issues. For example, white paper for Project Alchemy (a leasing vehicle for electric buses in India) was presented to the Investment Committee in September 2018. The UKCI Business Case recognises that investments in energy efficiency projects are traditionally more complicated as they face financial and technical barriers and market distortions e.g. energy subsidies. Targets have therefore been modelled accordingly.

Although not captured by this indicator, Project Bolt produced 60,233 MWh (gross) during this reporting period. Project Lakeside produced 378,413 MWh (gross).

Positive progress against this indicator in 2019 will require the UKCI Deal Team to strongly pursue new energy efficiency projects alongside more straightforward investment opportunities.

R6: BEIS and Macquarie to agree how to increase investment in energy efficiency projects over the remaining pilot period in line with mandate expectations. Plans in place by May 2019.

Key Points

- Macquarie has engaged with a full range of market actors and participated in promotional events. However, UKCI visibility and international recognition remain a challenge.
- There has been a steady improvement in deal activity, demonstrated by the frequency of origination meetings and the number of red papers presented to the UKCI Investment Committee.
- However, only one investment was completed during this reporting period. The lack of deals has had knock-on effects for the achievement of other results i.e. funds invested, MW installed and public finance mobilised.
- Attention needs to be paid to asset management, returns and future programming options as the pilot matures.

Summary of responses to issues raised in previous annual reviews (where relevant)

1. Improving performance - deployment of funds

The slow deployment of funds into equity investments remains a key risk. Deal progression under the new management has improved but remains behind expectations. Investment strategies for Africa and India have introduced a more coherent and targeted business plan. The UKCI Board has been willing to consider a variety of projects against the Investment Mandate when presented with compelling evidence. No further expansion of target geographies has taken place since target markets were broadened to include Sub-Saharan Africa. Macquarie will need to continue to provide BEIS with reassurance that they have the right staff resources in place to manage the Pilot and deliver strong value for money. The UKCI fee structure has been revised to incentivise deal completion and achieve overall cost savings, applicable from May 2018 to the end of the investment period.

2. Governance - Investment Committee

As per the requirements of the Limited Liability Partnership Agreement (LLPA), an evaluation of the Board and Investment Committee was conducted in November 2018. The findings were based on research conducted by the independent UKCI Evaluation Team led by Ipsos MORI.

The governance evaluation concluded that the structure and operation of the Board and Investment Committee provide an appropriate means of managing the pilot. Positive attributes include: the skills and

experience present in the Investment Committee, the level of communication among Investment Committee members and the flow of information between the Investment Committee and Board. The findings signalled no clear need for BEIS to appoint an independent member with developing market expertise, as recommended in the 2015-2016 Annual Review. For these reasons, the evaluation did not recommend any material changes to the Investment Committee composition or operation.

3. Aligning expectations and understanding of transformational change and poverty reduction

BEIS and Macquarie have successfully reached a common understanding of additionality and transformational change. Investment Committee papers have evolved to provide a clearer, more upfront view of how a deal meets these requirements. BEIS's participation in the Investment Committee has brought clarity and constructive challenge on these issues.

4. The external evaluation - capturing and embedding experience from the pilot

The independent evaluation has progressed as originally envisaged due to the lack of projects to evaluate. BEIS has worked closely with the Ipsos MORI led UKCI Evaluation Team to agree a workplan of useful evaluation activities which have the flexibility to respond to deal completions as and when they occur. The evaluation findings will provide essential lesson learning and evidence for future programming decisions.

5. Logframe

The logframe underwent a thorough review process starting in August 2018. The changes are outlined in Section B.

Recommendations: No recommendation for this section.

D: FUND PERFORMANCE NOT CAPTURED BY OUTPUTS

Governance

Four Board meetings were held during this reporting period. This included three physical meetings (December 2017, March 2018, June 2018, September 2018) and one ad-hoc call (October 2018). Standing agenda items include strategy, finance, risk and resourcing.

An evaluation of the Board and Investment Committee was conducted in November 2018. Both bodies were considered to be functioning effectively. No material recommendations were made.

Findings from the independent interim pilot evaluation were presented to BEIS in May 2018. The evaluation sought to understand: a) the early impacts of the pilot, including its commercial viability and transformational potential and; b) the effectiveness of the pilot's management and delivery. The findings helped inform the 12-month extension decision.

Lessons Learned from the Interim Evaluation

- There are clear investment opportunities in target markets despite high levels of interest from other donors and private funds. This is due to UKCI's ability to provide late-stage equity in local currencies.
- The pilot may be able to deliver more quickly by: expanding target geographies, considering minority equity instruments, investing in earlier stage development, investing alongside ODA funds and increasing the maximum ticket size. However, these changes bring associated trade-offs and risk divergence from the original Investment Mandate.
- The Limited Liability Partnership (LLP) model gives BEIS sufficient control over the pilot's direction and ensures investments are additional and transformational.
- UK branding and the visibility of UKCI activities remains a challenge.

Time-Extension

As mentioned throughout this review, the pilot was extended by 12 months to account for the delays incurred through the privatisation and realise the near-term pipeline of expected results. The management fee structure was revised to incentivise deal completion and achieve greater value for money.

E: VALUE FOR MONEY & FINANCIAL PERFORMANCE (1 page)

Key cost drivers and performance

UKCI key cost drivers include the equity investments in projects, management fees and due diligence costs.

Management fees cover the services provided by the UKCI Deal Team and associated support staff covering legal, financial and commercial matters. These upfront costs, although traditionally high for this type of vehicle, have been higher than expected relative to the number of investments made.

Due diligence costs cover extensive scrutiny of a target company's business, assets, capability and performance before a deal closes. These services are procured from external specialist providers in line with market practice for similar investment vehicles. Such consultancy fees are capitalised into the project in the event of a successful deal. Where transactions fail, these will be classified as general management fees. Due diligence costs are an essential part of identifying and investigating the risks surrounding a potential investment.

VfM performance compared to the original VfM proposition in the business case

The approach used to assess value for money (VfM) follows the UK Department for International Development's (DFID) 4E model which looks at Economy, Efficiency, Effectiveness and Equity.

Economy: *lowest price for inputs of the required quality*

The UKCI management fee covers the services required to run the pilot including portfolio management, due diligence, risk and commercial appraisal. BEIS has maintained consistent oversight of the quality of services received. The fee structure has been revised to achieve economy savings, following the poor assessment of value for money in previous Annual Reviews.

Macquarie has addressed initial concerns regarding gaps in emerging market expertise and limited staffing for monitoring and evaluation by utilising staff from the wider business group when needed. This system is considered more cost effective than having long-term dedicated team members. The quality of services received has not been an area of concern but should be kept under review. Overall, the level of management fees has been higher than envisaged in the Business Case due to unforeseen costs incurred during the privatisation and the complexity of the pilot i.e. challenging target markets, sectors and ambitious investment objectives.

Equity investments are subject to rigorous analysis and market soundings to ensure that UKCI invests the minimum amount needed to crowd-in additional investors and get projects off the ground. A detailed case for additionality has to be approved by the UKCI Investment Committee for each project. Each investment decision therefore demonstrates high economy.

Efficiency: *inputs produce outputs of required quality for lowest cost*

As noted throughout Section C, performance against Outputs has been mixed. This is mostly attributable to the lack of new deals. Implementation remains slow despite an increase in the number of projects reaching red paper stage. More deals are expected to increase the longer the new management team are in place. The levels of installed capacity and energy demand reduction have similarly lagged due to slow implementation. However, on a per-project basis, the volume of private finance leveraged has exceeded expectations. Unlocking flows of private capital to transform markets is one of the pilot's core objectives.

The ratio of fees relative to capital investments and the delivery of results has demonstrated limited efficiency to date. However, a new management fee structure for the extended investment period has

been designed to incentivise the completion of new deals and deliver greater efficiency. The revised fee structure will improve value for money by linking payment to performance.

Effectiveness: *outputs achieve outcomes*

As noted in Section B, performance against Outcomes is off-track. The slow speed of implementation has led to limited effectiveness and value for money.

Greenhouse Gas (GHG) emission reductions and job creation are substantially behind expectations due to the shortage of investments and types of completed deal. Project Lakeside, as an investment platform, only contributes results to a limited number of Outcome Indicators due to BEIS reporting standards. Project Bolt contributes a modest volume of results due to its comparatively small size.

It is difficult to determine UKCI's transformational impact due to the lack of investments made and limited availability of evidence to date. Project Lakeside, as the first private renewable energy yieldco in India for international investors, is expected to have positive transformational effects due to its novel structure, financial sustainability, scalability and ability to be replicated by others.

Project Lakeside is expected to provide demonstration effects by setting industry standards and proving that a financial structure of this kind can serve the Indian marketplace. This is expected to give Independent Power Producers the knowledge and confidence to replicate the model. This will channel more international capital into Indian renewables rather than polluting assets. Project Lakeside also proves the commercial case for renewable investments, with returns expected within six months of deal completion. The project showcases UK and City of London leadership in innovative green finance and demonstrates the investment potential of the Indian renewables market.

However, these positive attributes will not be known with certainty until the publication of the independent evaluation findings. In-depth case studies of Project Bolt and Lakeside will explore the extent to which these investments have catalysed or contributed to transformational change.

Equity: *results are equitably distributed*

Equity was introduced as a measure of value for money after the UKCI Business Case was written. However, every UKCI project is designed to benefit poor communities. These developmental indicators are outlined in relevant Investment Committee papers. Project Bolt and Lakeside are expected to improve energy access, improve air quality and deliver associated health benefits to poor communities in India.

Wider equity benefits include direct and indirect job creation, GHG emission reductions and the contribution this makes to limiting the effects of climate change, which disproportionately impact the poor.

Assessment of whether the programme continues to represent value for money

UKCI's current value for money performance has not met expectations. However, the promise of several deals completing in Q1 2019 is expected to improve the volume of results relative to management costs. BEIS should introduce specific value for money performance indicators to establish a more robust understanding (and articulation) of UKCI costs and results. This will be key to making evidence-based choices about future programming options.

R7: BEIS to define objective value for money performance indicators. Indicators agreed by May 2019.

Quality of financial management

Macquarie has adhered to all financial reporting requirements. UKCI presents complex financial and accounting challenges which Macquarie and BEIS have worked together to resolve.

| | |
|---|------------|
| Date of last narrative financial report | 30/09/2018 |
| Date of last audited annual statement | 31/03/2018 |

F: RISK (½ page)

Overall risk rating: Major.

Overview of programme risk

The UKCI risk-rating is considered Major. This means that the likelihood of potential risks materialising and the scale of their subsequent impact may prevent the pilot from achieving its objectives. Even though the overall risk-rating is high, several delivery risks have remained static following the introduction of mitigating actions. These are summarised below.

| Risk | Mitigating Action |
|---|---|
| UKCI delivers investments that fail to meet BEIS's expectations of transformation i.e. market leading and pioneering investments which ensure strong additionality. | <ul style="list-style-type: none"> • BEIS's presence at the Board and Investment Committee brings constructive challenge on transformational change and additionality at the deal and portfolio level. • Investment Committee papers have been refined to provide a clearer and more upfront view of how a deal meets additionality and transformational change requirements. • BEIS and Macquarie discuss deal and origination activity weekly to ensure a shared understanding of transformational and additionality objectives. |
| UKCI has limited experience of investing development finance in emerging markets. | <ul style="list-style-type: none"> • Macquarie continues to establish a strong network of African investors and developers through frequent in-country engagement. • Macquarie's uses its wide-reaching reputation to improve international networks. • BEIS's presence at the Board and Investment Committee brings additional experience of emerging markets. |
| UKCI delivers investments which have a detrimental impact on the local social, political, environmental or economic context. | <ul style="list-style-type: none"> • Macquarie perform high-quality deal and client due diligence and uphold high environmental, social and governance standards. • The UKCI Board monitors and reviews the effectiveness of risk management tools, policies and the fund's overall risk appetite. • The UKCI Deal Team maintains contact with British Embassies and High Commissions in target geographies for information on the local political economy. |

Outstanding actions from risk assessment

At the project-level, the UKCI Board is responsible for monitoring and reviewing the effectiveness of UKCI's risk management framework, policies and internal controls. A risk report is prepared for each UKCI Board Meeting. There are no outstanding actions in this regard.

There remains a risk that, despite progress, the UKCI model does not deliver the additional, transformational and demonstration effects expected. This would result from continued market barriers, insufficient resourcing and a weak communications strategy. BEIS will continually review and modify the above mitigating actions to reduce the probability of occurrence.

G: COMMERCIAL CONSIDERATIONS (½ page)

Delivery against planned timeframe

Delivery is behind the planned timeframe. As previously outlined, the investment period has been extended to November 2019. A higher rate of deal closure and capital deployment is expected in the remaining pilot period.

Performance of partnership(s)

A sense of genuine partnership is recognised between BEIS and Macquarie colleagues. BEIS and Macquarie maintain a fixed schedule of weekly calls to discuss the latest deal activity. Ad hoc calls or meetings are convened to discuss specific items such as strategy papers, time-sensitive deal updates or monitoring and evaluation requirements. This has notably improved the efficiency of the partnership.

There has been clear progress against issues identified in the 2017 Annual Review. Macquarie has been responsive to BEIS's requests for improved monitoring and reporting and has produced timely results returns, calculation methodologies and further deal specific information. Macquarie has allocated staff beyond the immediate Deal Team to UKCI reporting and monitoring. These issues are addressed in more detail under Section H.

Initial discussions with Board and Investment Committee members combined with observations of each forum suggests that BEIS and Macquarie are satisfied with the functioning of both bodies and the governance structure they represent. BEIS's participation on the Investment Committee has led to constructive discussions and a greater understanding of BEIS priorities. The communication among and between both bodies continues to improve, with the right issues being escalated to the Board. There has also been greater discursiveness at Investment Committees e.g. inclusion of BEIS in commercial discussions.

Asset monitoring and control

UKCI asset management will be guided by the Macquarie group's asset management methodologies and risk management frameworks. This will include drawing on financial reporting best practice from the Macquarie office in Gurugram, India. Asset monitoring became a standing item for discussion at the Board since the first project became operational.

Asset monitoring, control and management is expected to become a more material proportion of the UKCI team's time. The UKCI team will participate in the first substantive Board meeting with partners of Project Lakeside in December 2018.

H: MONITORING & EVALUATION (½ page)

Evidence and evaluation

This Annual Review is informed by evidence from the independent interim evaluation report, Board and Investment Committee papers, attendance at Board and Investment Committee meetings and interviews with BEIS and Macquarie staff.

Summary of evaluation progress and plans:

The UKCI independent evaluation is conducted by a research consortium led by Ipsos MORI. The evaluation assesses the impact of the pilot and the delivery process. Ipsos MORI utilise a real-time approach so findings are shared as they emerge to improve the delivery structure.

The evaluation team completed an interim evaluation of the pilot in August 2018. The evaluation drew on a combination of stakeholder consultation (including with Board and Investment Committee members, deal teams, and the wider investor community) and secondary evidence analysis (including review of similar donor market funds and market intelligence and benchmarking) to: i) understand the early impacts of the pilot; ii) assess the effectiveness of the pilot's delivery and management processes and; iii) outline options for the pilot's extension or modification. This was preceded by a presentation of early findings to BEIS in May 2018.

The evaluation activities conducted during this reporting period demonstrate that UKCI is attempting a unique form of delivery which can present challenges for deal origination in target markets. The findings have helped BEIS understand which elements of the investment mandate, fund management and delivery structure need attention to improve outcomes.

The delays in deal completion have limited the ability to generate learning about the delivery and monitoring of projects once investments have been made. This will be a key focus over the remaining project period. BEIS and the UKCI Evaluation Team revised the plan of evaluation activities in November 2018 in order to ensure the workstreams provide timely evidence throughout the extension period of the pilot. An interim report to inform decisions regarding the future of the pilot is expected in March 2019.

Monitoring progress throughout the review period

BEIS monitors progress against logframe milestones on a continuous basis. Results are collected and formally quality assured at least annually. BEIS monitors progress against previous Annual Review recommendations and the latest deal activity through weekly calls with the UKCI Deal Team. This regularity of communication should continue.

BEIS maintains close oversight of the type, size and structure of deal being progressed through its presence on the Investment Committee. BEIS oversees the strategic direction, development and execution of the pilot by chairing and participating in the UKCI Board.

I: TRANSFORMATIONAL CHANGE (½ page)

Rating

There is currently insufficient evidence to assess the likelihood of transformational impact due to the limited number investments, both of which are at an early stage of operation. The pilot is therefore rated 1 – no evidence yet available. The UKCI evaluation will assess the lifetime transformational impact of the pilot.

| | |
|---|--|
| 0 | Transformation judged unlikely |
| 1 | No evidence yet available - too soon to revise assessment in business case |
| 2 | Some early evidence suggests Transformation likely |
| 3 | Tentative evidence of change – transformation judged likely |
| 4 | Clear evidence of change - transformation judged very likely |

Evidence and evaluation

Every investment presented to the Investment Committee is scored against the transformational change criteria summarised below. The independent external evaluation will conduct a detailed assessment of transformational change through in-depth case studies of completed deals. Baselining work has commenced and will include stakeholder interviews, site visits, documentation reviews and the development of project-level theories of change.

The UKCI evaluation will assess the extent to which the UKCI pilot catalyses or contributes to transformational change. The assessment of early impact will also cover climate and development outcomes, additionality, visibility and private finance leveraged. An interim assessment of findings is expected in April 2019.

The criteria used to inform the transformational change assessment will include:

- Political will and local ownership: the need and process for change is locally owned.
- Capacity and capability can be increased: countries and communities have the capacities and capabilities needed to bring about change.
- Innovation: new technologies are piloted which could lead to wider and sustained change.
- Evidence of effectiveness is shared: lessons on usefulness are credible and shared widely.
- Leverage: creates incentives for others to act.
- Replicable: the costs of climate action are reduced to the point that acting on climate is a sensible decision for firms and individuals.
- Scale: interventions have sufficient reach to achieve institutional and policy reform or drive down the costs of technology deployment.
- Sustainability: change is likely to be sustained once ICF support ends.