Business Case

Summary Sheet

Title: Extension Business Case: Clean Energy Fund Technical Assistance (CEF TA) Programme		
Project Purpose: The CEF TA programme aims to improve energy access, to ensure energy security and to transition to low-carbon technologies through cost-effective investments that contribute to greenhouse gas mitigation, by using technical assistance in the Asia-Pacific region.		
Current BEIS Commitment: £10 million RDEL **Extension Value:** £9.5 million RDEL		**Country/ Region:** Asia-Pacific
Senior Responsible Owner: Kate Hughes		
Project Code:	**Original Start Date:** December 2015	**Original End Date:** December 2020
Quest Number:	**Extension Start Date:** April 2019	**Extension End Date:** December 2021

Contents

Intervention Summary

The Department for Business, Energy & Industrial Strategy (BEIS) invested £10 million in the Asian Development Bank (ADB)'s Clean Energy Fund (CEF) in December 2015. The fund aims to improve energy access, to ensure energy security and to transition to low-carbon technologies through cost-effective investments that contribute to greenhouse gas mitigation. The CEF sits under the ADB's Clean Energy Financing Partnership Facility (CEFPF). The CEF supports clean energy activities in ADB Developing Member Countries (DMCs) within the energy sector and non-energy sectors (water, urban and transport), particularly to increase clean energy investments, deploy new clean energy technologies, and lower barriers to new clean energy technologies.

The UK's investment is used solely for technical assistance (TA) activities, such as project planning and preparation, feasibility studies, capacity building workshops and seminars, training activities and knowledge dissemination activities. The UK's CEF TA programme focuses on supply-side clean energy projects, such as renewables, and demand-side projects, such as energy efficiency, and aims to leverage additional climate finance in the Asia-Pacific region, in order to achieve transformational change in clean energy deployment in the supported countries. The CEF is a multilateral fund with five donors (Norway, Sweden, Spain, Australia and the UK).

There is strong demand from the ADB's DMCs for TA support. However, the pipeline of new TA projects has been decreasing each year since 2015 (33 in 2015, 18 in 2016, 7 in 2017 and 4 in 2018) due to limited available funding remaining in the CEF to support new TA projects as a result of the greater-than-expected demand for TA support. Consequently, the CEF is projected to run out of funding for new TA projects by the end of 2018 because of its strong performance to date (as our annual reviews highlight, scoring the programme 'A' in 2017 and 'A' in 2018).

Of the UK's £10 million investment, £2 million was drawn down in 2016, £4 million was drawn down in 2017 and £4 million was drawn down in 2018. Norway provided an additional NOK 40 million (~£3.7 million) in December 2017 and is likely to make a similar contribution in December 2018. Norway's new contribution has been accounted for in the projection that that the CEF will run out of funding to support new projects by the end of 2018.

CEF TA projects are performing well against the ADB's three main quality screening criteria for high quality projects: strong government involvement, TAs being linked to loans and being innovative. We track case studies to obtain deeper insight into specific TA projects not provided by general programme monitoring. We select case studies to ensure that a diverse range of TA project types are monitored (such as different TA types, geographical coverage across the Asia-Pacific region (from Small Island Developing States (SIDS) to emerging economies), and different clean energy technologies (renewables, energy efficiency, etc.). We tracked five TA projects supported in 2016 as case studies, added two further new projects as case studies to monitor in 2017, and added two more in 2018. The nine case studies (out of 28 projects supported since 2015) provide encouraging indications of performance against the indicators in our Logical Framework (logframe), as discussed in our annual reviews.

This extension business case provides the rationale and evidence for providing an additional £9.5 million of RDEL contribution to the CEF. As with the original funding, this will be earmarked as grant funding for clean energy TA projects. The new funding will allow the CEF to continue to support good quality clean energy project proposals in 2019 and 2020. We will also track some additional indicators in the logframe with the new funding, as discussed in the Monitoring & Evaluation section.

Strategic Case

CONTEXT

The global challenge

The Paris Agreement, adopted at the 21st Conference of the Parties (COP) in 2015, commits participating parties to take measures to restrict global average temperature increase to 'well below 2°C'. As part of the Agreement, developed countries pledged to provide US $100 billion/year in climate finance support to developing countries for climate change mitigation and adaptation. This extension business case forms part of the UK's £5.8 billion international climate finance contribution (2016-2021) to meeting this target. The Intergovernmental Panel on Climate Change (IPCC)'s special report on *Global Warming of 1.5°C* (published in October 2018) highlights that unprecedented change is required to meet the ambitions of the Paris Agreement and to avoid the pathway to 3°C warming that we currently face.

The need for UK support

The aim of this extension business case is to provide the rationale and evidence for providing an additional £9.5 million of RDEL contribution to the Asian Development Bank's (ADB) Clean Energy Fund (CEF). The CEF aims to improve energy access, to ensure energy security and to transition to low-carbon technologies through cost-effective investments that contribute to greenhouse gas mitigation. The CEF sits under the ADB's Clean Energy Financing Partnership Facility (CEFPF). The CEF supports clean energy activities in the Asia-Pacific region in ADB Developing Member Countries (DMCs) with the aim to increase clean energy investments, to deploy new clean energy technologies and to lower barriers to new clean energy technologies.

The CEF is a multilateral fund with five donors (Norway, Sweden, Spain, Australia and the UK) and a total fund size of US $121.2 million (the breakdown of funding by donor is provided in the Financial Case). The UK's original contribution of £10 million was committed in December 2015 and is earmarked specifically for technical assistance (TA) activities, such as project planning and preparation, feasibility studies, capacity building workshops and seminars, training activities and knowledge dissemination activities. Through our monitoring and evaluation framework (Logical Framework), we have scored the programme an 'A' in both the 2017 and 2018 annual reviews.

However, the pipeline of new TA projects has been decreasing each year since 2015 (33 in 2015, 18 in 2016, 7 in 2017 and 4 in 2018) due to limited available funding remaining in the CEF to support new TA projects as a result of the greater-than-expected demand for TA support. Consequently, the CEF is projected to run out of funding for new TA projects by the end of 2018 because of the strong performance of the CEF to date. The new funding will allow the CEF to continue to support good quality clean energy project proposals in 2019 and 2020 (for example, there is already US $17.5 million worth of high quality proposals that have been received by the ADB that could be funded). We will also track some additional indicators in the Logical Framework (logframe) with the new funding, as discussed in the Monitoring & Evaluation section. Although we earmark our funding for TA projects, the CEF also supports three other types of projects: grant components of investments, concessional financing and TA linked to loans.

The CEF TA programme is one of the few ICF programmes that supports Small Island Developing States (SIDS) (in addition to emerging economies). As such, there is an important need for UK support to show leadership on climate change in the Asia-Pacific region and to increase our influence in the ADB.

Alignment with strategic objectives

The programme aligns well with the UK's international climate finance (ICF) strategic objectives as it aims to achieve "transformational change" through targeted investments in innovative projects with the potential to be scaled-up and replicated by others, and to tackle the barriers that hold the private sector back from investing. As set out in the original business case, promoting TA in the Asia-Pacific region through the ADB, which is a well-established multilateral development bank (MDB), will contribute to

the development of the skills, capability, capacity, incentives and institutional structures required to develop clean energy and achieve transformational change.

In 2014, the Independent Commission for Aid Impact (ICAI)'s review of the ICF recommended that a proportion of the ICF be released for resource expenditure (RDEL) and that the fund should place greater emphasis on providing technical assistance programmes. The review highlighted that doing so will increase the ability of supported developing countries to absorb UK climate finance (and channel their own domestic flows) and thereby ensure increased impact and value-for-money across the portfolio.

A key element of the ICF strategy is to be innovative to address barriers in the market. A key criterion for support under the CEF is that projects demonstrate innovative ideas (in terms of institutions, processes and technologies), alongside two other important criteria that must be met: strong government involvement and the TA being linked to wider loans for resulting capital projects.

Although 11 SIDS, five South Asian countries, Indonesia and China have amended or developed new policies, regulations or standards to support the development of renewable energy or energy efficiency as a result of the CEF in the first two years of the UK's investments, it is unknown at this stage whether or not this has led to ambitious clean energy deployment pathways being included in their Nationally Determined Contributions (NDCs). As part of the new UK funding, we will work closely with the ADB to identify how we can use TA projects to inform NDCs and to raise ambition.

THEORY OF CHANGE

Summary

As outlined in the Monitoring & Evaluation section, the theory of change remains fit-for-purpose for the new funding. Key Performance Indicator (KPI) 15 on transformational change remains the most relevant KPI for the CEF TA programme, as TA programmes do not aim to achieve greenhouse gas emissions reductions directly, but to create the enabling conditions that allow clean energy technologies to be sustainably scaled-up and replicated (and consequently lead to transformational change in achieving greenhouse gas emissions reductions). Figure one below summarises the focus of assessing the performance of the programme against KPI 15:

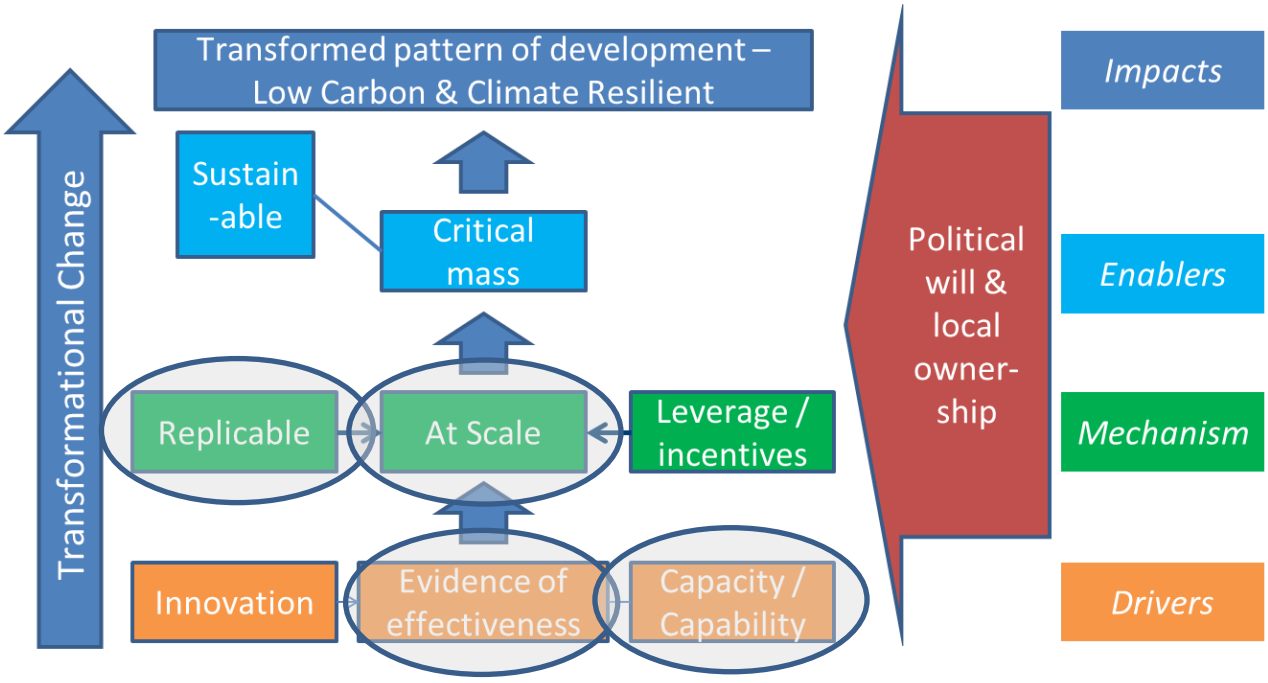

Figure 1: the focus of assessing programme performance against KPI 15

The CEF TA programme assesses the degree of transformation against four of the criteria shown above (circled): 'evidence of effectiveness is shared', 'capacity / capability', 'replicable' and 'at scale'. These four criteria were selected when the programme was first set up in December 2015, and they remain the most appropriate criteria to assess against, as outlined in the original business case and the 2018 annual review. Progress against the relevant criteria are assessed using the following box markings, which are standardised across all ICF programmes that assess against KPI 15:

0 Transformation judged unlikely
1 No evidence yet available
2 Some early evidence suggests transformation likely
3 Tentative evidence of change – transformation judged likely
4 Clear evidence of change – transformation judged very likely

The overall goal of the CEF TA programme is to achieve box marking 4 (transformation judged very likely). The overall TA box marking will continue to be assessed as part of the results collection period (January to March each year) and the annual review process (which immediately follows the results collection period). This is calculated as the median score across all of the assessed criteria. In its first annual review in 2017, the programme achieved box marking 1 as it was a newly-established programme and projects had not been running for long enough to build the evidence base to determine the degree of transformation. However, in the second annual review in 2018, the programme achieved box marking 3. The full methodological process and further explanations are provided in the 2018 annual review (Annex I) – the published link is provided below:

- CEF TA 2018 annual review: https://aidstream.org/files/documents/CEF-TA-Programme-Annual-Review-2018-20180820020824.pdf

The theory of change is outlined in the original business case and remains fit-for-purpose. It is shown in figure two below.

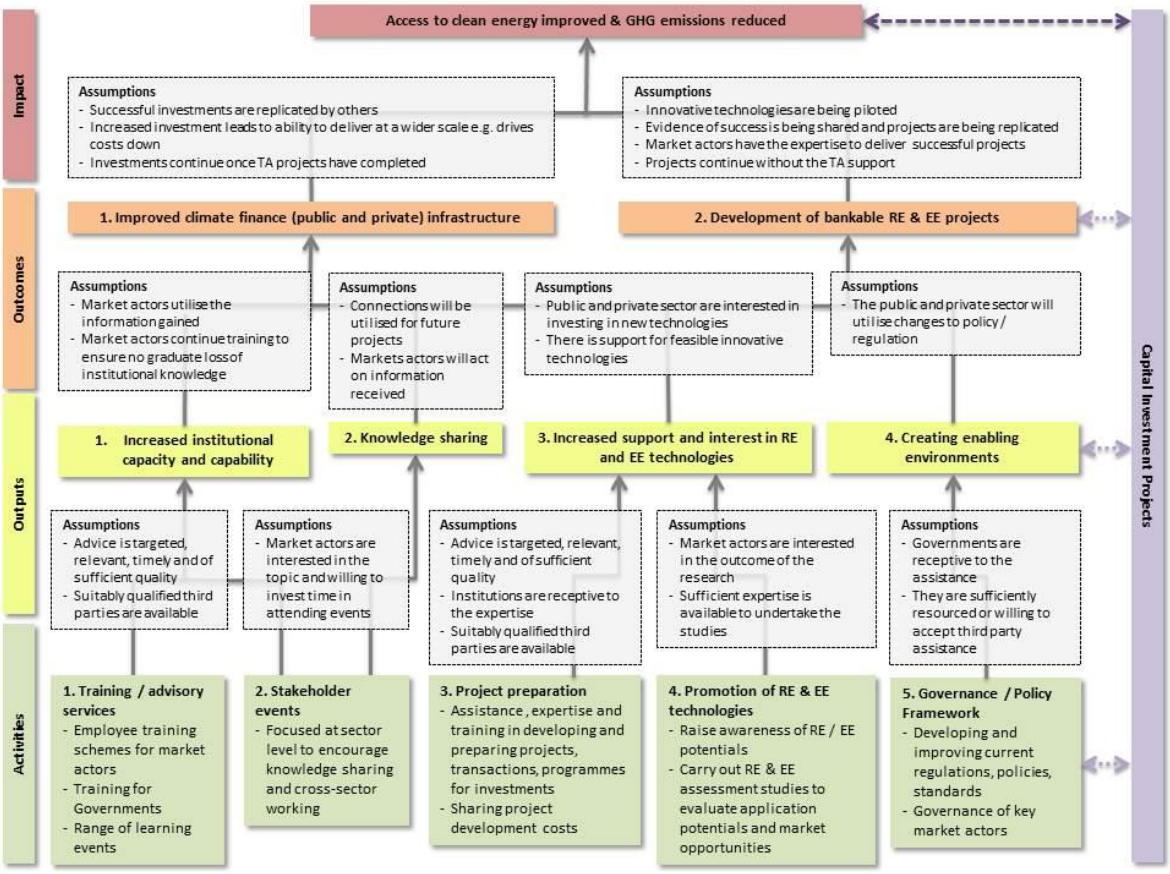

Figure 2: the theory of change for the CEF TA programme

LEGAL COMPLIANCE

International Development Act

The *International Development Act 2002* section 4(2)(b) provides a power for the Secretary of State (SoS) to "contribute to any fund that is intended to be used (wholly or partly) for one or more relevant purposes". A "relevant purpose" is (a) furthering sustainable development in one or more countries outside the United Kingdom; (b) improving the welfare of the population of one or more such countries; (c) relief aid or (d) a purpose which broadly corresponds to purposes (a), (b) or (c). "Sustainable development" is a broad concept under the Act and is stated to include "any development that is, in the opinion of the Secretary of State, prudent having regard to the likelihood of its generating lasting benefits for the population of the country or countries in relation to which it is provided". In addition, in order to contribute to a fund, the SoS must also be satisfied that the contribution "is likely to contribute to a reduction in poverty"[1].

This programme meets the development assistance requirements of the *International Development Act 2002*, as it will contribute to sustainable development in beneficiary developing countries. As with the original £10 million contribution, the new funding will have positive impacts on energy and resource savings, energy security, economic benefits (both investment and cost savings), increased employment opportunities and consequently will contribute to sustainable development and poverty reduction. The funding provided within this programme will benefit ODA-eligible developing countries, and it is the ambition of this programme that the supported technologies and TA activities will contribute to creating the enabling environments necessary to deploy those technologies in the medium-to-long-term to mitigate the impacts of climate change and lead to wide development benefits. Examples of such benefits include: improving health (through reduced local air pollution), improving energy security, reducing energy costs (through reduced reliance on variable fossil fuel prices and declining resources) and the creation of new technology markets (leading to economic benefits and potential job creation). These are all important aspects of reducing poverty.

These factors are important in reducing poverty in developing countries. In addition, as per the *International Development Act 2002* section 1(1A), "before providing development assistance under subsection (1), the Minister shall have regard to the desirability of providing development assistance that is likely to contribute to reducing poverty in a way which is likely to contribute to reducing inequality between persons of different gender". The new funding will meet this requirement, along with those of the *Equality Act 2010*, as outlined in the next section.

The programme will also increase the expertise of the supported national governments and it will improve their regulatory framework, therefore helping the power sector to continue to grow to meet the demands of people and industries, and to increase access to energy for vulnerable people and communities. Furthermore, the transfer of skills and technologies will support future economic opportunities in the recipient countries.

Equality Act 2010

BEIS is required by the *Equality Act 2010* to give due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations between those who share a characteristic and those who do not (including in relation to age, gender, disability, race, religion, pregnancy and sexual orientation). The duty applies to all BEIS's functions. We ensure that appropriate social safeguards are in place and expect suppliers that we fund to factor equality-related considerations into the use of UK funds. Additionally, the impacts of climate change are likely to have a disproportionate impact on women so mitigating the impact is likely to be positive for gender equality.

The new UK funding will be, at a minimum, aligned with the Asian Development Bank's (ADB) policies as per the existing CEFPF, which the CEF is delivered through. The ADB's Strategy 2030 includes "accelerating progress in gender equality" as one of its seven operational priorities, and gender performance is tracked and reported annually. However, the ADB's CEFPF could perform better on gender equality, as highlighted at the CEFPF Annual Consultation meeting in April 2018. This will be

1 International Development Act 2002 https://www.legislation.gov.uk/ukpga/2002/1/section/1

an important requirement of the new UK funding, which will be tracked as an additional indicator in the logframe (discussed further in the Monitoring & Evaluation section).

Secondary benefits

As UK Official Development Assistance (ODA) is untied, any secondary commercial benefits to the UK resulting from the new funding have not informed the options appraisal process (outlined in the Appraisal Case). However, it is worth noting that the extension funding is likely to increase the UK's influence in the ADB's CEFPF as one of the main donors, and through BEIS's active participation in events, such as the annual Asia Clean Energy Forum (one of the case study TA projects tracked in our logframe), we will increase the visibility of the UK's support on clean energy. Furthermore, the funding will enhance the UK's international strength and leadership in TA, complementing the UK PACT (Partnering for Accelerated Climate Transitions) programme, announced in October 2018, and the UK's support to the World Bank's ESMAP (Energy Sector Management Assistance Programme), announced in December 2018. We will work closely with the ADB and the UK Department for International Trade (DIT) to ensure that UK markets are aware of the open, global procurements put out by the ADB through the CEFPF. We will also work closely with Posts in our Embassies in the countries of the case study projects that we track in our logframe to increase the visibility of UK funding.

Appraisal Case

OPTIONS APPRAISAL

Summary

The criteria used to assess the funding in the original business case were:

- Alignment with ICF priorities
- Fund establishment time
- Governance (including fiduciary and environmental standards)
- Ability to influence strategic investment direction
- Country coverage
- TA investment priorities

Although these criteria remain fit-for-purpose, we have incorporated the learning from the BEIS TA programmes that have been developed since then to update the criteria for assessing different options for the new TA funding. In particular, we have reviewed the criteria from the UK PACT programme and the ESMAP programme to produce the following criteria for assessing the new funding:

- Alignment with strategic ICF objectives
- Deliverability
- Potential for transformational change
- Aligns with ICF priority countries / regions
- Ability to influence ADB strategic investment direction
- Completements other ICF technical assistance programmes

A detailed options appraisal exercise was carried out to identify the best delivery option from a value-for-money perspective. The scoring process is shown below, followed by explanatory text summarising the key strengths and weaknesses of each option. The scoring process was undertaken by four BEIS officials, who agreed the scores.

SCORING	Criteria							Total without weighting
5 = Fully meets the criteria 1 = Does not meet the criteria	Aligns with ICF strategic objectives (for achieving transformational change)	Deliverability	Potential for transformational change	Aligns with ICF priority countries/regions	Aligns with BEIS objectives and strategies	Ability to influence the strategic investment direction of the delivery partner	Complements other ICF technical assistance programmes	
Options								
Do nothing	1	5	1	1	1	1	1	**5**
Extend the ADB's CEF TA	5	5	5	3	2	3	5	**28**
Expand the ADB's CEF TA	5	4	4	3	2	4	5	**27**
Extend other ICF TA programmes	5	2	3	4	3	2	2	**21**
New programme (non-ADB)	3	1	2	5	3	1	3	**16**

In summary, from the options appraisal process, extending the ADB's CEF TA is the highest-scoring option (28), followed by expanding the ADB's CEF TA (27). The main advantage of extending, rather than expanding, the ADB's CEF TA is that deliverability is ensured from supporting similar, rather than different, activities and the potential for transformational change is higher due to the strong track record of the types of TA activities supported to date. There is a slight risk that new types of TA activities beyond the existing remit of the CEF would not be as effective in leading to transformational change.

VALUE-FOR-MONEY ASSESSMENT

Overview

As part of the options appraisal process, a value-for-money (VfM) assessment was carried out in-line with the Department for International Development (DFID)'s 4Es approach: economy, efficiency, effectiveness and equity. Overall, we deem a £9.5 million extension to the CEF for TA projects to be value-for-money as all supported TA projects to date have leveraged wider ADB finance to become capital projects and have performed well against the indicators in the logframe (as demonstrated in the annual reviews, which scored the programme an 'A' in 2017 and 2018). Furthermore, the well-established governance structures of the ADB and BEIS for the original funding have ensured that supported activities deliver the greatest potential for transformational change (further details are provided in the Commercial Case).

Economy

Economy refers to whether we or our agents are buying inputs, such as staff, consultants, raw materials and capital that are used to produce outputs of the appropriate quality at the right price.

The ADB charges a service fee of: i) 5% of the amount disbursed for grant components of investment projects up to US $5 million, or 2% (with a minimum of US $250,000, whichever is greater) of the amounts disbursed for the same type of grants above US $5 million; or ii) 5% of the amounts disbursed for technical assistance operations. The fees are charged based on actual project disbursements, however, the equivalent amount for the entire project is already set-aside/earmarked as soon as the project is approved by the ADB, but will only be drawn from when disbursements are made. At project completion, undisbursed amounts including undisbursed fees are returned to the fund as savings.

This is broadly in line, if not cheaper than comparatives – for example, the World Bank charges 5% on the first US $50 million, then 4% above US $50 million. We have been working closely with the ADB in the CEFPF for six years since December 2012 when BEIS invested £35 million in the ADB's CCUS Fund (which also comes under the CEFPF), as well as for three years since December 2015 for the CEF specifically. As such, the BEIS ICF team has established excellent working relations with the ADB to drive value-for-money in supported projects and we consider them to be a strong delivery partner. We find their management fees represent good value-for-money.

The ADB already has significant experience in using an open and competitive process for selecting delivery agents in the project design process in order to get high quality inputs (e.g. staff and consultants) at a good price. Further details set out in the Commercial Case.

Efficiency

Efficiency refers to how well our inputs are converted into outputs. The CEF was set up in 2007 and since the UK joined the CEF in December 2015, the CEF supported 33 TA projects in 2015, 18 TA projects in 2016, 7 TA projects in 2017 and 4 TA projects in 2018. As discussed in the Strategic Case, the reduction in the number of new TA projects that have been supported over that period is due to the limited available funding remaining in the CEF to support new TA projects. This has been a result of the greater-than-expected demand for TA support. Furthermore, all of these projects successfully moved from project approval to project implementation with the ADB cancelling only one project in that period, but the funds were returned and re-allocated to new projects.

Furthermore, this ICF TA programme aims to test whether, by investing in a TA project and addressing a lack of knowledge or regulatory reform, it can support economy- and sector-wide changes that can potentially deliver results far more efficiently than through funding a series of individual capital projects.

Effectiveness

Effectiveness refers to how well the outputs (which are under the direct control of the delivery partner) achieve the outcomes (over which there is less control). It is important that the outputs help to build the correct conditions to enable increased climate finance being available and accessed, and also to contribute to building a healthy pipeline of bankable renewable energy and energy efficiency projects (outcomes). As the two annual reviews of the ICF CEF TA programme to date highlight, all TA projects supported since the UK joined the CEF in December 2015 have gone on to leverage wider ADB climate finance or finance from other sources. Two of the nine TA projects that we track as case studies are given as examples below:

- **Project TA 9085 – Sri Lanka: Wind power generation project**
  - *Summary:* the TA has prepared the feasibility study and due diligence assessments for the estimated US $750 million loan (US $200m from the ADB) required to implement this project. The final environmental assessment (a migratory bird survey) is currently being completed. The TA component of the project has been extended to a new end date of 28th February 2019 to account for the additional migratory bird survey.
  - *Outcome assessment:* US $200 million of ADB finance (loan) was secured in October 2017 for the implementation of the wind power generation project.

- **Project TA 9266 – Regional (South Asia): Improving institutional capacity on preparing energy efficiency investments**
  - *Summary:* the TA is supporting at least three energy efficiency project concept papers and the identification of at least five energy efficiency investments. The TA component of the project is due to close on 30th November 2019.
  - *Outcome assessment:* the project mobilised US $1.2 million of in-kind contributions from the Korea Energy Agency (KEA) in March 2017.

Increasing institutional knowledge and sharing knowledge should contribute to helping market actors to develop more effective clean energy projects. By providing training and sharing successes with the private sector, it should increase the likelihood of private sector investment. The CEF also provides project preparation assistance to ensure that institutions have the required capability to initiate clean

energy projects, and it works to raise awareness of the different clean energy technologies that are available by carrying out assessment studies. Furthermore, CEF aims to create an enabling environment by working with national governments to ensure that their regulatory environment is suitable. Such activities are important in creating the conditions needed to allow the outcomes to occur. Given that the ADB has twelve years of experience in operating the CEF, they are well-placed to deliver the outputs and outcomes in our logframe, which report against KPI 15 on transformational change.

It is important to note that we do not quantify and attribute the benefits of ICF TA programmes given difficulties in consistently and accurately estimating these benefits. As such, we do not present a quantitative cost-effectiveness assessment of the programme (such as Net Present Values or Benefit-Cost ratios that are commonly presented for ICF's capital investment programmes). We track case study projects, such as those above, to gain deeper insight into performance and to demonstrate effectiveness at the project level in addition to performance at the portfolio level.

Equity

The outputs and outcomes of the CEF TA programme may not necessarily be immediately received by the poorest people or communities in the countries that it supports, but instead will be received by government bodies and institutions involved in clean growth transitions, including financial institutions and companies. Influencing how these institutions operate will build capacity and transform markets.

The strength of the CEF TA programme is that it covers both low- and middle-income countries from Small Island Developing States (SIDS) to large emerging economies. By tracking case studies as part of our monitoring and evaluation framework for the programme, individual projects can be assessed to ensure equity considerations have been factored in, and any issues regarding equity have been adequately exposed. We will work with delivery partners and Posts in our Embassies to ensure that any unintended equity impacts are not overlooked, and capture and act on lessons learned.

As discussed in the Strategic Case, the new UK funding will be, at a minimum, aligned with the ADB's policies for gender equality and the ADB's Strategy 2030 includes "accelerating progress in gender equality" as one of its seven operational priorities. Gender performance is tracked and reported annually by the ADB. However, as stated in the Strategic Case, the ADB's CEFPF could be improved with regards to gender equality, as highlighted at the CEFPF Annual Consultation meeting in April 2018. This will be an important requirement of the new UK funding, which will be tracked as an additional indicator in the logframe (discussed further in the Monitoring & Evaluation section).

Commercial Case

ASIAN DEVELOPMENT BANK

Clean Energy Financing Partnership Facility

The proposed funding mechanism for this intervention is to extend our original £10 million contribution to the Asian Development Bank (ADB)'s existing Clean Energy Fund (CEF) by £9.5 million. The CEF is one of four funds under the ADB's Clean Energy Financing Partnership Facility (CEFPF), which is one of the bank's primary mechanisms for supporting clean energy development in developing countries in the Asia-Pacific region. The other three funds under the CEFPF are: the Asian Clean Energy Fund (a Japanese fund), the CCUS Fund (which the UK has contributed £35 million to since 2012) and the Canadian Climate Fund for the Private Sector in Asia (a Canadian fund). As explained in the Strategic Case, the CEF currently has five donor countries: the UK, Norway, Sweden, Australia and Spain. The UK's original contribution was provided to the CEF and was earmarked by TA activities. The extension funding will also be earmarked for TA activities in the CEF.

The CEFPF was established in April 2007 to help to improve energy security in ADB developing member countries (DMCs) and to mitigate climate change. The facility does this by financing the deployment of new, more efficient and less polluting supply- and end-use technologies, through either grant or non-grant resources. CEFPF resources are also intended to finance policy, regulatory and institutional reforms that encourage clean energy development. Potential investments include:

- Deployment of new clean energy technologies
- Projects that lower the barriers to adopting clean energy technologies
- Projects that increase access to modern forms of clean and efficient energy for the poor
- Technical capacity programmes for clean energy
- Provide additional financial resources and technical support for components of investment projects to improve energy security in DMCs and to decrease the rate of climate change through increased use of clean energy

The facility contributes to the energy sector in achieving the ADB's scaled up annual target set in September 2015 when the ADB pledged to double its annual climate financing to US $6 billion by 2020, with US $4 billion for climate mitigation and US $2 billion for climate adaptation.

Due Diligence

Since the UK joined the CEF in December 2015, the ADB provides confidence in its ability to deal with environmental, social and governance issues, as well as fraud corruption through its appropriate management, governance and fiduciary standards The ADB has over 40 years of experience working and investing in the region and has well-developed connections with regional government and private sector institutions.

The ADB commissioned an independent evaluation of the CEFPF, which was completed in 2016 (carried out by independent consultants but managed by the ADB's Independent Evaluation Department). The evaluation report states that: *"…the overwhelming feedback from the interviews is that the CEFPF is an effective mechanism, and that it has helped ADB to achieve its clean energy goals, while also meeting donor expectations".* Overall, the CEFPF is identified as an effective mechanism that has helped to catalyse dramatic growth in ADB's clean energy investments from less than US $700 million annually in 2007 to more than US $2.4 billion in 2014. The facility's investments will result in an estimated reduction of 7.7 $mtCO_2$/year, based on cumulative energy savings of 6.5 TWh/year, renewable energy generation of 3.6 TWh/year and more than 800 MW of installed capacity through the end of 2014. This has been achieved by investments of US $125 million through the CEFPF itself, which have leveraged US $2 billion of ADB co-financing and more than US $1.8 billion of non-ADB financing from public and private sector partners. CEFPF-supported projects have led to significant policy and regulatory actions and reforms, have spurred new technologies, business models, and financing approaches, and have enabled the connection of more than 140,000 households to electricity.

The ADB promotes country-level partnership strategies with a pipeline of projects and TA. Consulting services and procurement financed by the CEF follow the ADB's *Guidelines on the Use of Consultants by Asian Development Bank and Its Borrowers* (2013) and *Procurement Guidelines* (2015) (both as amended from time to time). The selection and engagement of consultants, and the procurement of goods and services under such TA is the sole responsibility of the ADB. In case of components of investment projects, the selection and engagement of consultants, and the procurement of goods, work and services are carried out by the DMC recipients in accordance with applicable ADB procedures.

The ADB applies their *Anticorruption Policy* (1998) and *Integrity Principles and Guidelines* (2015) (both as amended from time to time) in administering the UK's contribution to the CEF. ADB's *Anticorruption Policy* (1998) requires staff, grant recipients, beneficiaries, consultants, bidders, suppliers and contractors involved in the CEF, or any activity financed by or related to CEF, to observe the highest standards of ethics and personal integrity. Any party found in breach of ADB's *Anticorruption Policy* (1998) may be subject to sanctions and remedial actions in accordance with ADB's *Integrity Principles and Guidelines* (2015). Any legal entity or individual debarred or cross-debarred in accordance with the *Integrity Principles and Guidelines* (2015) will be ineligible to participate in activities financed by or related to CEF.

As highlighted in the 2018 and 2017 annual reviews, we find the ADB to be managing the CEF effectively in-line with expectations, which led to the programme scoring an 'A' in both annual reviews. All supported TA projects since the UK joined the CEF in December 2015 have gone on to leverage wider ADB and/or other finance for the capital element of those projects. As discussed in the 2018

annual review, only one project did not do so (the 'IND: Railway Energy Efficiency Project in India'), which was withdrawn from the portfolio due to the schedule of investment being delayed to 2019. As there is no urgency for the India TA project, the funds were re-allocated to other TA projects in the portfolio. Both these points highlight the efficiency and effectiveness of the ADB's commercial management in ensuring the best used of the available funding (as discussed further in the Appraisal Case).

Financial Case

CLEAN ENERGY FUND FINANCIAL ASSESSMENT

Overview
The extension to the Asian Development Bank (ADB)'s multilateral Clean Energy Fund (CEF) will be £9.5 million of RDEL funding from BEIS's international climate finance (ICF). As discussed in the Monitoring & Evaluation section, the actual amount provided to the CEF will be £9.0 million, with an appropriate amount set aside to commission an independent evaluation of the UK's funding to date.

The CEF has both a grant funding element and a technical assistance (TA) element. The CEF has a total fund size of US $121.2 million, as of 30th June 2018 when the CEFPF semi-annual progress report was submitted to BEIS (there have been no new funds between June 2018 and December 2018). As discussed in the Strategic Case, since April 2007 (when the CEF was set up), 105 TA projects (across all types of TA: project preparatory, policy & advisory, and capacity building) have been supported. Since the UK joined the CEF in December 2015, 28 TA projects have been supported.

Donor Contributions
As discussed in the Commercial Case, the CEF is made up of contributions from five governments: the UK, Norway, Sweden, Australia and Spain. The UK's original contribution of £10 million (US $13.4 million) was committed in December 2015, which is earmarked specifically for TA projects for clean energy activities, such as energy efficiency and renewable energy. The breakdown of their donations to the fund is below:

Financing Partner	Total (US $m)
Norway	41.0
Sweden	24.2
UK	13.4
Australia	13.3
Spain	9.5
TOTAL	**121.2**

An additional £9.0 million (~US $11.8 million) would make the UK the second largest donor with ~US $24.9 million (£19.0 million) of contributions. In December 2017, Norway provided an additional NOK 40 million (~£3.7 million) to the CEF (included in the above table) and provided a further NOK 20 million (US $2.4 million (~£1.8 million)) in December 2018 (not included in the above).

Clean Energy Fund Financial Health
US $39.3 million of financing from the CEFPF was required in 2018 to support new projects in the pipeline (plus US $2 million for project fees). However, as US $17 million of funds remain, US $18 million of new good quality project proposals received by the ADB cannot be funded without new contributions from donors. This reflects the stronger-than-expected continued demand for support from

developing countries. This does not affect existing projects and only refers to new project proposals that the ADB has received. As stated above, Norway provided an additional contribution of NOK 20 million (~US $2.4 million) in December 2018 and with further funding from the UK, the CEF could continue to support good quality new clean energy project proposals in 2019 and 2020. We will also track some additional indicators in the Logical Framework (logframe) with the new funding, as discussed in the Monitoring & Evaluation section.

The calculated contribution required from donors to meet the new pipeline of high quality project proposals that have been received by the ADB is US $18 million (~£13.7 million). Accounting for the additional US $2.4 million (~£1.8 million) from Norway, US $18 million (~£13.7 million) of new project proposals cannot be funded. This justifies a UK contribution of ~US $18 million (~£13.7 million) but due to ICF RDEL spending constraints in the 2018/2019 financial year, only £9.5 million is available. Funding for the remaining ~US $4.2 million (~£3.2 million), plus funding for any new project proposals received in 2019/2020, will need to be sought from new or existing donors.

Financial Audits
Independent financial statements and audits are carried out every year, and electronic and hard copies of the reports are provided to BEIS every August, alongside the semi-annual progress report (January to June). The BEIS programme manager scrutinises these reports and provides feedback to the ADB. Similarly, the ADB provides an annual report on progress in March ahead of the annual consultation meeting in April, which includes information on the performance of the fund, including financial data. Donors have the opportunity to provide written and verbal feedback on the report.

PAYMENTS SCHEDULE

Original Contribution
Of the UK's original £10 million investment, which was paid by Promissory Note to the Bank of England, £2 million was drawn down in 2016, £4 million was drawn down in 2017 and £4 million was drawn down in 2018, as per the schedule of payments in the original business case. The payments were made in Q1 of each year.

Recipient	2015/16 (£m)	2016/17 (£m)	2017/18 (£m)
ADB	2	4	4

We looked carefully at all of the drawdown requests to ensure that encashments would specifically be for TA activities and agreed on an encashment schedule based on the need of the CEF (planned pipeline spend for each year), so that we did not pay in advance of need.

New Contribution
We will use the same process for the new funding as we used for the original contribution. The finance will contribute to the total investments in the CEF (therefore being mixed with the investments from four other donors). We will agree in an extension to our existing Memorandum of Understanding (MoU) with the ADB that the equivalent value of our investment will continue to be earmarked solely for funding new TA projects or expanding existing TA projects. The ADB will therefore provide evidence as to what projects the equivalent amount of finance (£9.0 million) has been used to fund for auditing purposes.

We will agree an extension to our existing MoU with the ADB to ensure:

- The UK's contribution is only being used to fund TA projects
- The proposed encashment schedule
- Disbursement is based on need
- The UK's funding will be disbursed by December 2020
- The new end date for the MoU will be 31st December 2021 (to allow at least one year to track any projects supported in 2020 as case studies and to allow time for the results of the independent evaluation to be implemented)
- That the ADB will monitor performance against our new indicators and our amended existing indicators (see the Monitoring & Evaluation section for further details)

- That the ADB will proactively increase the visibility of the UK's funding

The contribution is a fixed contribution. No additional finance will be required to develop and implement TA projects. The management of this contribution is discussed in the Management Case. As with the original contribution, the new funding is RDEL and it is only available for spend by Promissory Note (to the Bank of England) between January and March 2019. It is envisaged that the full Promissory Note will be laid in February 2019 following Ministerial approval. The encashments will then be drawn down according to the following schedule:

Recipient	Feb 2019 (£m)	Feb 2020 (£m)
ADB	4.50	4.50

This schedule reflects the schedule of the original contribution (payments made in February each year), which we judge to be appropriate for the new funding. The second payment (February 2020) will also be dependent on the results of the independent evaluation that we will commission in 2019 (discussed in the Monitoring & Evaluation section), in addition to the needs assessment.

Management Case

RESOURCING

The CEF TA programme will be managed by 0.3 SEO FT of new resource and overseen at the strategic level by the existing BEIS programme manager (0.1 G7 FT). The 0.3 SEO FT will be responsible for undertaking the following activities to manage the programme:

- Regular calls, email correspondence and biannual face-to-face meetings with ADB CEF team
- Biannual calls with case study project managers to obtain progress updates
- Complete the annual results collection and ensure the logframe is updated biannually
- Attend the annual consultation meetings alongside the 0.1 G7 FT
- Draft and publish the annual review
- Undertake relevant policy work associated with the CEF TA programme

The M&E section discusses the new and edited logframe indicators that the BEIS programme manager (0.3 SEO) will need to monitor in addition to the existing indicators in the logframe. The programme manager will also manage the international carbon capture, usage and storage (CCUS) programme (0.6 SEO) and provide flexible support to other programmes (0.1 SEO).

RISK MANAGEMENT

This programme offers a strong fit with the ICF risk appetite for moderate to high investment risk, where the expected benefits have strong transformational potential, but may not be realised. This is a small, additional contribution to a high-performing, low risk fund. A summary of the main risk threats is shown in the table below with the risk responses that we and the ADB will undertake. There are also uncertain events that present themselves as opportunities. A summary of the main opportunities is shown below with the responses that we and the ADB would take to realise them. Summary risk profiles for both the risk threats and opportunities are shown below to visualise the number of risk threats and opportunities that fit each category (in terms of impact x probability).

Summary Risk Threats Profile

Almost certain >80%	Major (6)	Major (7)	Severe (8)	Severe (9)	Severe (10)
Likely >50%<80%	Moderate (5)	Major (6)	1	Severe (8)	Severe (9)
Possible >20%<50%	Minor (4)	Moderate (5)	1	2	Severe (8)
Unlikely >5%<20%	Minor (3)	Minor (4)	2	Major (6)	Major (7)
Rare <5%	Minor (2)	Minor (3)	Low (4)	Moderate (5)	Major (6)
	Insignificant	**Minor**	**Moderate**	**Major**	**Severe**

Summary Risk Opportunities Profile

Almost certain >80%	Major (6)	Major (7)	Severe (8)	Severe (9)	Severe (10)
Likely >50%<80%	Moderate (5)	Major (6)	1	Severe (8)	Severe (9)
Possible >20%<50%	Minor (4)	Moderate (5)	Major (6)	1	Severe (8)
Unlikely >5%<20%	Minor (3)	Minor (4)	Moderate (5)	Major (6)	Major (7)
Rare <5%	Minor (2)	Minor (3)	Low (4)	Moderate (5)	Major (6)
	Insignificant	**Minor**	**Moderate**	**Major**	**Great**

Risk Threat Description	Impact	Probability	Category	Risk (Threat) Response Description
There is an inherently higher risk that TA projects will not deliver the desired outputs and outcomes, as a result of challenges faced in countries but also due to difficulties in measuring outcomes that can be directly attributed to TA projects. However, the CEF TA programme also offers a strong transformational potential to shift whole economies / sectors onto low carbon pathways.	Moderate	Possible >20%<50%	Major	**Response:** Reduce **Description:** The ADB already has well-established governance, and monitoring and reporting structures; however, we will work with the ADB and other donors to ensure monitoring and reporting remain fit-for-purpose, in particular for evaluating the effectiveness of TA projects. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB
Relates to the potential that an intervention is assessed not to have delivered transformational results.	Major	Possible >20%<50%	Major	**Response:** Reduce **Description:** This will be addressed through developing a portfolio of projects that support TA activities that are genuinely additional and support the development and deployment of renewable energy and energy efficiency technologies. Close monitoring of progress from the UK and other donors will ensure that where projects are not progressing well, problems can be addressed at a relatively early stage, and if necessary, redirect funds in order to ensure that investments are transformational. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB
As with all TA programmes, there is a risk that there will not be the necessary political will from the host governments. This risk will be central to the decision-making process during project selection, and the ADB will continue to monitor it during the development phase of TA projects.	Major	Possible >20%<50%	Major	**Response:** Reduce **Description:** The process of initiating projects under the CEF reduces this risk as project ideas result from the agreed CSPs developed by the ADB in consultation with member countries. Funded activities will include knowledge-sharing events that are also expected to help to increase the will of the private sector to consider renewable energy and energy efficiency projects by demonstrating the benefits that they can have. We will also work more closely with the British Embassies in the countries of the case studies that we are monitoring in order to ensure political will and support in those countries. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB
There is a risk that the ADB may not able to identify all the other work in this area and duplicates other donor investments.	Moderate	Unlikely >5%<20%	Moderate	**Response:** Avoid **Description:** We will work with the ADB to map out what is already taking place in this area, including what is being planned and delivered by the Green Climate Fund. However, the evidence we have so far indicates this remains a gap across the climate finance architecture and in particular for building bankable energy efficiency and renewable energy project pipelines. **Owner:** BEIS Programme Manager **Actionee:** ADB

There is a potential risk when investing in a fund managed by a large MDB that there will be an established governance structure and therefore a reduced ability for the UK to influence the direction of the fund.	Moderate	Unlikely >5%<20%	Moderate	**Response:** Reduce **Description:** We consider that the risk here is reduced due to the existing strong working relationship that the ICF team has within the CEFPF. We also have a UK representative on the Board of the ADB. We also have a good understanding of the ADB's processes and our experience of working with the ADB indicates that they do take on board the opinions of the donors. We have also established relationships with the other CEF donors. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB
The CEF is likely to run out of funding in 2018 if new or existing donors do not invest further. This would significantly impact the ability of the ADB to continue to deliver this work, but would not impact the results of the UK's investment as these projects are already committed.	Moderate	Likely >50%<80%	Major	**Response:** Accept **Description:** This is a low threat to the impacts of the UK's investments. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB

Risk Opportunity Description	Impact	Probability	Category	Risk (Opportunity) Response Description
There is an opportunity for the ADB to engage with its networks to encourage increased funding to the Clean Energy Fund from new or current donors (from both the public sector and private sector).	Major	Possible >20%<50%	Major	**Response:** Enhance **Description:** We will encourage the ADB to obtain further funding to the Clean Energy Fund through its networks. **Owner:** BEIS Programme Manager **Actionee:** ADB, BEIS Programme Manager
Improve the UK's international reputation in supporting climate change mitigation in developing countries by increasing the visibility of UK investments in projects.	Moderate	Likely >50%<80%	Major	**Response:** Enhance **Description:** We will work with the ADB and the British Embassies in the countries of the case studies that we are tracking to improve the visibility of UK investments. **Owner:** BEIS Programme Manager **Actionee:** BEIS Programme Manager, ADB, British Embassies

Monitoring and Evaluation

OVERVIEW

Logframe Indicators

The existing theory of change for the CEF TA programme remains fit-for-purpose for the extension funding and was outlined in the Strategic Case. The existing logframe also remains fit-for-purpose and the new funding will enable us to fund new good quality TA projects that would not otherwise get funded, as discussed in the Strategic Case.

However, in addition to new TA projects, we will include two new indicators and make edits to some of the existing indicators to build on the learning from the first three years of the programme to further enhance the value-for-money of our investments. The revised logframe will be published alongside this business case, but a summary of the changes is provided below:

Output indicator 5.4: internal and external knowledge-sharing dissemination activities undertaken by the CEF TA portfolio as a whole (such as project outputs, fund-level impacts and lessons learned)

Output indicator 5.5: number and percentage of women employed and/or supported by CEF TA projects per year and cumulatively since 2015, and the types of employment and support

These changes reflect two areas for improvement that were highlighted in the 2018 annual review: for the ADB to improve its dissemination activities and increase gender equality in the CEF.

Another change is that the two indicators for output 3 will no longer be tracked due to output indicator 3.1 being too similar to output indicator 2.1 and can now be encompassed within the revised wording for the latter (which clarifies the difference between training events and wider stakeholder events, which are monitored as separate indicators), and due to output indicator 3.2 being relevant for only a few projects and is an activity that would only need to be completed once for those projects (rather than each year). The impact weightings for the remaining outputs (1, 2, 4 and 5) have consequently been revised from 20% to 25% to reflect this, whilst still maintaining their same weighting and importance against each other (which remains fit-for-purpose). In summary, the following two indicators will no longer be tracked:

Output indicator 3.1: number of stakeholder events which include a slot on RE/EE technologies

Output indicator 3.2: number of EE/RE assessment studies undertaken to evaluate application potentials and market opportunities

Minor edits to the phrasing of existing indicators have also ensured greater clarity on what they aim to assess (e.g. adding 'per year and cumulatively since 2015' to impact indicator 2, outcome indicator 2.1, outcome indicator 2.2 and output indicator 4.1 to ensure that decreases in numbers between years are not misunderstood as a decrease in ambition or performance between years). All edits are included in the revised logframe.

The edits and the new indicators will be discussed and confirmed with the ADB as part of the 2019 results collection period and the 2019 annual review process. A link to the original logframe and a link to the published 2018 annual review can be found below:

- Original CEF TA programme logframe: https://aidstream.org/files/documents/CEF-TA-Programme-Logframe-20180820020802.pdf
- CEF TA 2018 annual review: https://aidstream.org/files/documents/CEF-TA-Programme-Annual-Review-2018-20180820020824.pdf

The CEF TA programme reports against Key Performance Indicator (KPI) 15 on transformational change and this remains the most relevant KPI for this programme. The 2018 annual review details the specific methodological approach undertaken to monitor KPI 15 (Annex I).

Independent Evaluation

An independent evaluation of the Clean Energy Partnership Financing Facility (CEFPF) as a whole (which includes the CEF) was completed in 2016, not long after the UK joined the CEF in December 2015. In April 2018, BEIS commissioned an independent evaluation plan to be produced to design an evaluation that could potentially be commissioned in 2019 to assess the performance of the UK's investments in the CEF to date. The report recommended that a three-phase theory-based evaluation is undertaken:

- Inception phase:
  - Detailed design, theory of change revision, detailing and baselining
  - Design and commencement of longitudinal work, including case studies, and thematic reviews
- Formative evaluation:
  - The main focus of the work, focusing on the processes of implementation, identifying emerging results and lessons to feed into the remaining duration of the programme
- Summative (final) evaluation:
  - A performance evaluation to bring together the results of the CEF TA funding, pulling together evidence of performance and lessons for future programme design

A set of overarching evaluation questions was produced to form the basis of the evaluative work, which follows OECD-DAC criteria and captures process, outcome and performance measures. We will commission an independent evaluation in 2019 with a draft report due in early 2020 to inform the 2020 results collection period, which will draw on the evaluation plan. An appropriate amount will be set aside for the independent evaluation. We envisage that the independent evaluation will be able to assess against outcome indicators in addition to output indicators. The results of the evaluation will not only be used to inform our CEF TA programme, but the findings will be shared widely in the international climate finance (ICF) team to inform the management of other programmes with TA components (such as UK PACT and ESMAP) and to improve the methodological techniques used to assess TA.

The ADB's Independent Evaluation Unit (IEU) will not be used for four reasons: firstly, to ensure that the evaluation is truly independent of the ADB; secondly, the ADB's IEU only conducts impacts-based evaluations rather than mechanisms-based evaluations; thirdly, the ADB's IEU only conducts evaluations upon project completion rather than during project implementation; and fourthly, the ADB's IEU only undertakes evaluations of projects that are implemented through the ADB's operations department (which the CEF does not fall under).