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<table>
<tr><td>Short title</td><td>ICF KPI 7: Level of installed capacity (MW) of clean energy generated as a result of ICF support</td></tr>
<tr><td>Type of indicator</td><td>Cumulative (individual years summed to total): report annual in-year totals only against each milestone. These annual in-year totals should then be summed at the end of the results template to give a cumulative total for the current spending review period (2011/15), the life of the programme and where results will occur outside the life of the programme for total programme benefits.</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table>
<tr><th>Requirement</th><th>Summary</th></tr>
<tr><td>Is this a DRF indicator?</td><td>No</td></tr>
<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>No – however clarification on attribution</td></tr>
<tr><td>Units</td><td>MW</td></tr>
<tr><td>Attribution</td><td>Pro-rata share of public funding</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>• On grid vs. Off grid</td></tr>
</table>
</td></tr>
<tr><td>Technical Definition / Methodological summary</td><td>This indicator measures total installed capacity (MW) of clean energy generated (by technology) by ICF projects and programmes (grid-connected, off-grid). The proposed definition includes:

‘Clean energy’ which refers to low and zero carbon energy generation sources, including but not limited to the following technologies: wind power, sola, fuel cells, tidal systems, hydropower, carbon capture and storage (CCS), second generation biofuels, gasification technologies, clean cookstoves, biomass and boilers and kilns for process heating/drying. It does not include nuclear.

‘Installed capacity (MW)’ refers to the rated power output when operational in megawatts (MW) of the clean energy technology, either in the output of electrical power (MWe) or thermal power (MWt). Power outputs must be operational to be included.

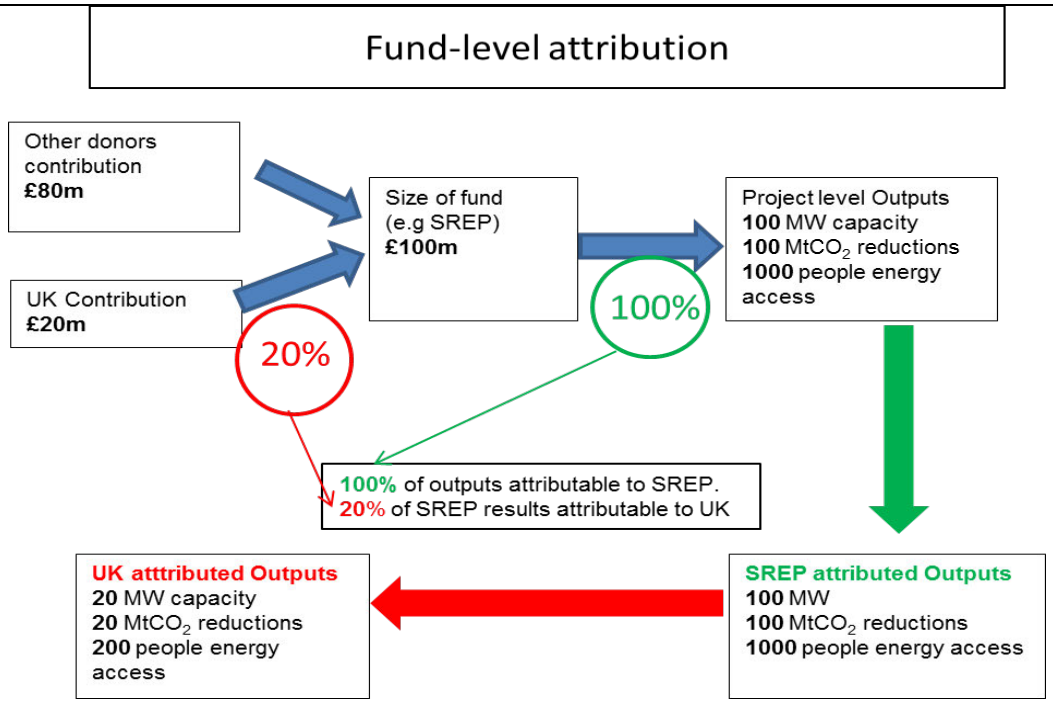
‘Grid-connected’ refers to clean energy generation projects that are feeding into a national grid. These projects will typically be utility-scale, in the order of tens or hundreds of MW.

‘Off-grid’ refers to clean energy generation projects that do not feed into a national grid but may feed into localised energy grids if that localised energy grid is not connected to the national grid. Examples may include a district heat network within an industrial estate or solar PV projects with battery storage serving a small number of buildings.

The level of total installed capacity will be reported by those implementing the project.</td></tr>
<tr><td>Rationale</td><td>The intended result of greater investment in low carbon development is that energy is supplied from clean sources. This indicator measures the increased clean energy capacity. It is usually assumed that low carbon energy generation partially displaces fossil fuel energy generation – the extent is case specific. This indicator therefore measures demonstrated progress towards a transformed energy supply.

It should be noted that there is a distinction between observed generation and capacity. To align with AsDB, we have chosen to monitor installed capacity of clean energy. Projects should consider looking at realistic generation in their evaluations</td></tr>
</table>

	and reviews. This will help to distinguish between high quality and low quality instances of technology.
Country office role	For each of their climate change programmes, country offices will need to assess the total installed capacity of clean energy and supply this information to the Climate and Environment Department.
Data sources	Project level data can only be obtained from the M&E of projects supported by the ICF and, when collected, should be disaggregated by technology type, on-grid/off-grid, and rural/urban where possible. Country level data can be used for quality assurance purposes (see later box). At a country level, the main data source is: • **IEA World Energy Outlook.** This is an annual publication providing data disaggregated by energy generation technology, including renewables and by country. It is considered the authoritative publication on international energy supply and demand. Data is reported in terms of installed capacity as well as energy supplied. Country offices may choose to comment on the source of the underlying IEA data (if known) and its reliability.
Reporting organisation	DFID – Internal Indicator (for project level)
Data included	Installed capacity of low carbon energy generation reflects generation that occurs at all scales from ICF projects; from single user to utility scale grid connections.
Formula/Data calculation (including attribution rule)	The sum of the total installed capacity (MW) of clean energy in ICF projects. Where HMG are only funding part of the project, benefits (MW) should be calculated as a pro-rata share of public funding. For example, if we are funding 10% of a 100MW installation, we should claim 10MW as attributable to DFID. **Fund-level attribution** (i.e. at point of UK investment) should be applied for reporting expected and actual results and headline results/figures used in Business Cases (to ensure all projects can report on a consistent basis). This method involves sharing results across all donors that contribute to a fund. All results are attributable to the relevant fund (e.g. CIFs, CP3, GAP) regardless of whether these funds blend with other sources of finance in implementing projects at levels below the point of UK investment. For example, if the UK invests £25m into a fund that totals £100m of public money, the UK would claim 25% of the results from that investment. This applies to all results. The long term ambition is to develop the data availability to enable all projects to use the lowest/most direct level of attribution possible in the future (i.e. project level). Therefore, advisers should be working to develop sufficient data to calculate project level results reports, and where possible, provide this information now alongside headline Fund level results. To note, the distinction between attribution at the project level and at the Fund level (or at point of UK investment) is only an issue where the UK is investing in funds where there are multiple investment levels.

	
Worked example	The project will invest in large-scale renewable energy generation in sub-Saharan Africa. The M&E team will need to ask the project implementer what level of clean energy has been installed. For example, what is the installed capacity in MW of the new solar power station. Results are attributed at the point of UK investment (Fund level) and shared across all donors that contribute to a fund.
Most recent baseline	The baseline should reflect the situation prior to ICF funding being provided and anticipated projections of what would happen without the ICF. For long running programmes the baseline should be taken as 2010 unless otherwise stated. The baseline should align with the economic appraisal in the project design.
Good performance	Higher installed capacities demonstrate that demand and investment in clean energy are growing. For an improvement, we would therefore expect installed capacities to increase. The indicator measures demonstrated progress towards a transformed energy supply.
Return format	Installed capacity of clean energy (MW) generated by ICF programmes in current year.
Data dis-aggregation	<u>Data to be disaggregated and reported in the ICF results template:</u> - on-grid or off-grid installed capacity <u>Data to be disaggregated as part of workings and Quest number provided:</u> Disaggregation of the following variables will not be collected as part of the ICF results template. Please include disaggregated data in your working documents and record the Quest number for these documents in the ICF results template. - technology type including: solar, fuel cell, tidal systems, hydropower, CCS, second generation biofuels, gasification technologies, clean cookstoves, process heating/drying or other. - urban or rural - source of funding
Data	Technology implementers/contractors should have access to data on the installed

availability	capacity of clean energy.
Time period/ lag	Depending on the technology, installation may take time to deliver. Country offices should aim to report annually on this indicator where possible.
Quality assurance measures	Where possible a third party, such as an independent evaluator should be asked to verify the capacity installed. Project implementers may have an incentive to give optimistic figures. IEA country data could be used to assess whether the share of clean energy generated is in the right proportion. For example, if we estimate that the new energy generation is 10% of the country's energy, we would expect this to match up with 10% of the IEA's energy generation figure. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF results templates. Any comments can usually be added into the free text columns on the far right of each ICF results template. Further guidance should be available in the commissioning note.
Data issues	If the person installing capacity is asked for the data, there maybe incentives to overstate the installed capacity. Country offices are encouraged to make use of any opportunities for independent verification of installed capacity through project review or evaluation. Consideration was given to whether this indicator should measure the amount of clean energy generated, rather than installed . To align with AsDB (as they are a key partner on CP3, a major ICF programme) we chose the total installed capacity of clean energy. In evaluations and reviews, projects should consider looking at achievable realistic generation and what generation (if any) is being displaced. This will differentiate between high quality and low quality instances of technology. It is also difficult to know whether to capture energy savings at the end use level or supply level. If the latter it is difficult to determine whether the energy is clean.
Additional comments	Reference: PWC Low Carbon Development Indicators Report AsDB use this indicator to monitor projects.
Lead	Statistical advisor: Alex Feuchtwanger (DFID) a-feuchtwanger@dfid.gsx.gov.uk Subject matter leads: Simon Ratcliffe (DFID): s-ratcliffe@dfid.gov.uk

<table>
<tr><td>Short title</td><td>ICK KPI 8: Number of hectares where deforestation has been avoided through ICF support</td></tr>
<tr><td>Rationale</td><td>The aims of the UK's forest finance are to reduce greenhouse gas emissions from the forest sector, preserve bio-diversity and reduce poverty by reducing deforestation and forest degradation. This indicator will provide a broad measure of success against the headline forestry outcome of reduced deforestation of the world's forest land.</td></tr>
<tr><td>Indicator Type</td><td>Annual change year on year in Hectares.</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table><tr><th>Requirement</th><th>Summary</th></tr><tr><td>Available for reporting?</td><td>Yes</td></tr><tr><td>Methodology changes?</td><td>Yes</td></tr><tr><td>Units</td><td>Hectares</td></tr><tr><td>Attribution</td><td>Pro-rata share of public funding</td></tr><tr><td>Disaggregation to be reported in results templates</td><td>• NA</td></tr></table></td></tr>
<tr><td>Technical definition/ methodology</td><td>This indicator seeks to measure the change in forest area resulting from the ICF project relative to the counterfactual of what would have happened in the absence of the intervention. It will aggregate:

a. the number of hectares where deforestation has been avoided;
b. the number of hectares where afforestation or reforestation has taken place

Since there are no readily available methods for calculating forest degradation, i.e. the reduction in forest quality, we do not expect projects to report degradation at present.

Programme managers should in the first instance identify: (i) the geographical scope of programme (size and location of the area/ jurisdiction which the project will affect) where possible and (ii) the time-frame over which they expect the programme to have an impact (which may well extend beyond the delivery period).

ICF analysts have identified a number of approaches which project managers can choose according to the type of project they are operating:

1) Risk based method (developed by Ecometrica)
2) Historic baseline
3) Modelled baseline
4) Control area

All these methods have in common the following three steps:

Step 1: Establish the counterfactual: what land use would have occurred in the absence of the intervention? (this is the hardest part, more guidance below)</td></tr>
</table>

Step 2: Estimate the change in land use occurring in the intervention area/ target jurisdiction since the start of the intervention.

Step 3: Calculate the difference between counterfactual and intervention.

Step 1: Establish counterfactual or reference level

In practice **steps two and three are common to risk based, historic, or modelled baselines; it is only the approach to the counterfactual which differs.** The following paragraphs will briefly set out the three approaches and how they can be employed.

1. *Risk based approach*

Ecometrica have developed a risk based mapping tool which can be applied to calculate KPI 8 for geographically specific ICF projects. The method defines the counterfactual or reference level by dividing the intervention area into 30m by 30m squares and allocating each to one of the following risk levels:

Risk Category	Brief Description	Expected loss within 20 years
V. High	At immediate risk of loss - attractive and accessible with no effective protection	>80%
High	Accessible and attractive second choice land for cultivation and extraction, limited protection	60%-80%
Med	Some access, moderately attractive for cultivation or extraction or partially protected	40%-60%
Low	Difficult to access and not attractive for cultivation or extraction and/or fairly well protected	20%-40%
V. Low	Very difficult to access, little potential for cultivation or extraction and/or very well protected	Under 20%

Source: Ecometrica, *The Hectares Method,* table 2. Available here.

The risk categories are based on a model that predicts deforestation is highest for areas which are Accessible, Cultivable, have Extractable value and are Unprotected. The model is therefore known as ACEU.

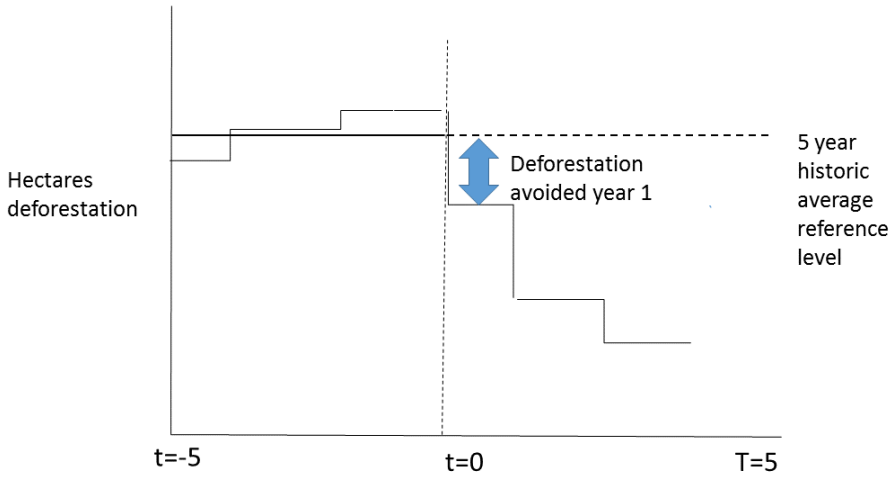
An example KPI 8 report delivered by Ecometrica and Embrapa in the Cerrado region of Brazil is set out in the Annex.

2. *Historic baseline:*

This method assumes the future will be like the past: the average deforestation for a number of years preceding the intervention is used to compare deforestation during/ after the intervention (see figure 1). For some programmes a historic reference level is mandated due to the nature of the programme. More specifically, REDD+ programmes have an established precedent of reporting land use changes against a 10-year historic baseline.

Other projects which have historic data of five years at a minimum or 10 years if available and more representative for the intervention area may also choose to report against a historic baseline if they so wish.

Figure 1: Example historic reference level



3. *Modelled projection baseline*

A **modelled baseline** seeks to predict future deforestation in the project area/ jurisdiction by modelling the key drivers of land use change, for example population, economic growth, commodity prices and making predictions about what land use change will occur against which observed forest change can be recorded. We would not expect projects to use a modelled/ projected baseline for KPI 8 reporting but in exceptional circumstances, e.g. where project staff have particularly strong modelling/ analytical skills, it could be agreed in discussion with ICF project managers and analysts. As an example this is currently the case with Defra's Blue Forests Programme.

4. *Control area*

Another approach which could be considered is to have a **comparison or control area**: in this approach an area similar in characteristics (or different only

	through random variation) to the intervention area is compared over time to the intervention area[1]. This type of approach is typical in robust impact evaluation, but due to the extent of data collection and analysis required we would not expect it as standard for KPI 8 reporting **unless a project has designed in a quantitative Impact Evaluation at the inception of the project,** an approach which is highly desirable from a learning and evaluation perspective. A third party would normally be contracted to carry out the calculation as part of their evaluation and monitoring of the programme. *Choice of approach* The choice of counterfactual approach between options *1-4* for step 1 should be made considering analytical and practical considerations. ICF analysts can be consulted. All of the above approaches assume a project which has a spatially explicit target area where they expect to reduce deforestation. However this may not always be the case (e.g. for a green investment fund operating across multiple countries or even continents), in which case it may not be possible to report on KPI 8 at the aggregate level. Notwithstanding this, some projects may wish to report on spatial aspects of their programme using KPI 8, acknowledging that this may not capture the full breadth of their impact on deforestation. **Step 2: Estimating deforestation during/ after the intervention** This step requires data on forest change. Readily available satellite maps showing forest extent exist which vary in historic depth, regularity and granularity. An example is Global Forest Watch's online data tool which allows policy makers to analyse forest loss using a web-based tool[2]. Ecometrica have developed an online tool which draws on University of Maryland data to compare forest change. This tool can also be used to compare forest change using alternative map sources. **Step 3: Difference between counterfactual and actual** This is simply calculated by subtracting the change in forest area observed (step 2) from the reference level (step 1). For multilateral programmes (e.g. the Forests Investment Programme, or Integrated Sustainable Forest Landscapes project) it will also be necessary to adjust the total number of hectares saved on a pro-rata basis and account for the UK/ ICF's contribution to the programme. **Leakage** This indicator as set out here does not actively measure or analyse leakage. For example, shutting down illegal logging in one region or country could simply

[1] As an example, see Jayachandran et al (2017) 'Cash for carbon: A randomized trial of payments for ecosystem services to reduce deforestation' *Science* Jul 21;357(6348): 267-273

[2] http://www.globalforestwatch.org/map/3/15.00/27.00/ALL/grayscale/loss,forestgain,forest2000?tab=analysis-tab&begin=2001-01-01&end=2017-01-01&threshold=30&dont_analyze=true

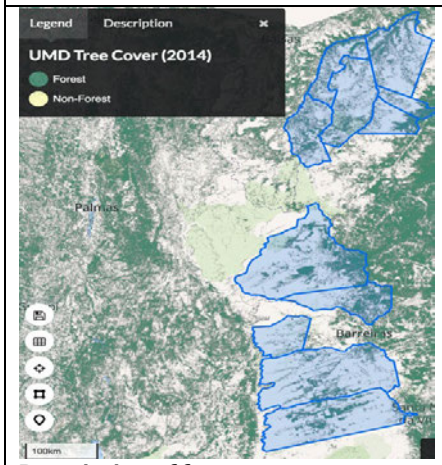
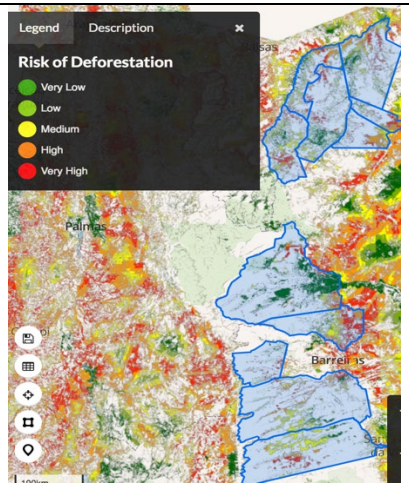
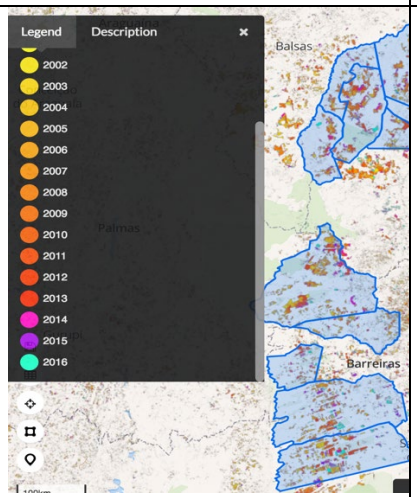
	displace companies to another area with weaker governance structures in place. For conservativeness, ICF appraisal guidance suggests that a 25% reduction can be made to account for the possibility of leakage. This can be flexed where for example the project is making specific efforts in this regard, such as the retiring mechanisms used in REDD+ programmes. **Additionality** In principle, establishing a robust counterfactual should enable identification of what would have taken place in absence of the programme. However given that it is never possible to know this for sure (in the absence of time travel) and the possibility of multiple programmes operating in the target area it may be considered that an additional discount should be applied. Where the 'control areas' approach is used, an additional discount is unlikely to be necessary due to the robustness of this approach. However the final judgment on any level of additionality discount to apply should take into account the degree to which the counterfactual used appears to adequately reflect subsequent changes in the programme area and other interventions in the area. ICF appraisal guidance suggests a standard conservative figure of 50%, but this can be flexed in either direction.
Country office role	As part of annual programme reporting, country offices and/or ICF analysts will be required to quality assure information provided.
Data source	The data required depends on the method used: • For the Ecometrica risk based method, satellite data maps and risk analysis are provided by Ecometrica. • For a historic baseline, forest cover data for the target area for at least the last five years (and preferably 10) is needed. • For modelled options, demographic and/or socioeconomic data is required and will need to be obtained by/ through project partners. Ecometrica's forest mapping is based on the freely available University of Maryland dataset[3]. Another useful source of spatial information about forest cover and loss, also based on this dataset, is the Global Forest Watch monitoring tool which is user friendly and accessible; available here. Country deforestation data is available from the FAO's Forest Resource Assessment datasets, which are released every five years[4].
Attribution	Where HMG are only funding part of the project, benefits (hectares) should be calculated as a pro-rata share of total project/ programme funding. For example, if we are funding 10% of a 1000 Ha conservation project, we should claim 100 Ha are attributable to HMG.
Return format	Hectares - total i.e. not abbreviated by thousands or millions
Data availability	Annual monitoring and evaluation reporting from relevant programmes (at a minimum the six identified above). See data issues section below.
Time period/lag	Programme managers should report the number of hectares where deforestation and degradation were avoided in the preceding year where possible. Alternatively best available data should be provided.

[3] http://glcf.umd.edu/data/landsatFCC/
[4] http://www.fao.org/forest-resources-assessment/en/

Quality assurance measures	We anticipate three layers of QA in DFID: country offices, CED and FCPD. Within country offices there may need to be consultation with other donors working in the forestry sector. Country offices are not involved in all DFID programmes. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF (and DRF) results templates. Any comments can usually be added into the free text columns on the far right of each template. Further guidance should be available in the commissioning note. BEIS and Defra analysts will carry out QA on this indicator before data is passed on to DFID for aggregation.
Data issues	Some countries have better land use monitoring systems and forestry inventories in place than others (for example, Brazil is likely to be fairly sophisticated whereas the Democratic Republic of Congo will have relatively basic systems). **Data quality will therefore be variable**. However the use of satellite data can to some extent overcome these issues. All countries report to the FAO Global Forests Resources Assessment[5] in a standardised format. Data on the number of hectares classed as 'forest land' (FAO definition) should therefore be obtainable from national government sources. Again, data quality will vary from country to country.
Additional comments	This guidance was developed by Defra with review from BEIS and DFID analysts, and expert review from the Forestry commission. An additional indicator is being developed indicating the number of hectares of forest managed under a programme. KPI 6 (greenhouse gas savings) and KPI 10 (value of ecosystem services) will be calculated using output from KPI 8. **In the future, we would like to improve this indicator by:** • Working with international experts such as the FAO, World Bank Forests Investment Programme staff, World Resources Institute, and the Government of Norway to develop more sophisticated methodologies and improved national forestry inventories.
Lead official	Subject matter lead: Jonathan Stern (Defra) jonathan.stern@defra.gsi.gov.uk Statistical advisor: Sehr Syed (DFID) Sehr-Syed@dfid.gsx.gov.uk

[5] http://www.fao.org/forestry/fra/en/

Annex: Example KPI 8 report for Defra Cerrado Project (Brazil) using Ecometrica Risk-Based Method.

Forest in impact area: 1,678,415ha	**Forest at Risk 2016: 'without policy scenario'** Expected loss: 43,471 ha	**Forest Loss 2016: 'actual outturn'** Actual forest lost: 39,651 ha	**Avoided forest loss 2016**: 3,820 ha =Expected – Actual deforestation.
 **Description of forest types:** transition between savanna (cerrado) and dry forest (caatinga). Source: UMD Canopy Tree Cover, for 2000 Hansen et al. with of forest loss between 2001 and 2012 removed to update vegetation extent to 2012. Areas with a minimum canopy cover of 30% and minimum area of 1 ha according to Brazil definition of forests were extracted to give 2012 extent.	 **Main drivers / risks:** conversion to agriculture, mainly mechanised, large scale. Sources: Morel et al (2015). Risk of deforestation map for cerrado areas in Bahia, Tocantins, Goias and Piaui; based on protection status of lands, threat of access to forests by road, cultivability and proximity to previous deforestation.	 **Cause of loss:** conversion to agriculture Source: Hansen et al (2013), V1.4. Forest loss accuracy assessment was carried out by Mitchard et al (2015) and found to be of high accuracy for this area.	Actual forest loss for 2016 was approximately 4,000 ha lower than the risk-based reference level. The amount of forest loss decreased in 2016 compared to 2015. The amount of avoided forest loss has increased between 2014 -2016, from -263 ha in 2014 (assessment only covered the municipalities in Bahia, report available here) to 3,820 ha in 2016. ICF intervention in this area enabled registration of over 14,000 small farms onto the CAR, which should encourage their compliance with the national forest code. The small areas of forest within these farms limits the potential impact of the programme at landscape level. Small farmers may still convert areas of forest to agriculture if they are above the 20% threshold, but should reforest if they are below. This is the first post-implementation reporting period, so some impact is expected. Contribution Score: low (given working with a subset of population) Percentage Attribution to ICF: 20%
The impact area comprises the 2012 extent of cerrado and caatinga vegetation within 6 municipalities of western Bahia. Much of the natural vegetation was cleared for agriculture between 1980 and 2000 (Batistella and Valladares, 2009). The largest patches of remaining forest are officially protected.	The main drivers of forest loss are the expansion of large to medium scale farms growing soybeans, wheat, cotton and coffee. There has also been expansion of some urban areas. The areas at high or v. high risk are suitable for agriculture (rainfall >1000 mm, moderate slope, and not formally protected). The areas at v. low risk were mostly within protected areas or on steep slopes.	Forest loss within the impact areas reduced slightly although there were some unexpectedly high losses of forest in the municipalities of Correntina (for both 2015 and 2016), Formosa de Rio Prieto (for both 2015 and 2016), São Desidério (for both 2015 and 2016), Baixa Grande do Ribeiro (only in 2016) and Luís Eduardo Magalhães (only in 2016).	To increase hectares of avoided forest loss in this region ICF investment should consider: > targeting areas and actors with influence over larger areas of forest at risk; > incentives or measures to encourage retaining areas of forest above the minimum legal threshold.

<table>
<tr><td>Short title</td><td>ICF KPI 9: Number of low carbon technologies supported (absolute number of units installed) through ICF support</td></tr>
<tr><td>Type of indicator</td><td>Cumulative (individual years summed to total): report annual in-year totals only against each milestone. These annual in-year totals should then be summed at the end of the results template to give a cumulative total for the current spending review period (2011/16), the life of the programme and where results will occur outside the life of the programme for total programme benefits.</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

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<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>No – however clarification on attribution</td></tr>
<tr><td>Units</td><td>Absolute number of units installed. Not the number of different technologies supported.</td></tr>
<tr><td>Attribution</td><td>Pro-rata share of public funding</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>• N/A</td></tr>
</table>
</td></tr>
<tr><td>Technical definition/ Methodological summary</td><td>This indicator is intended to capture progress in demonstrating the viability of LCD and measure reaching ‘commercial scale’ at the project level. The intended result of greater investment is building local capacity to innovate and scale up development. Greater commercial delivery of low carbon domestic technologies results in development and private sector growth. This measures demonstrated progress towards the building of local capacity to deliver LCD and adaptation services and investments.

It will be measured at the project level - it will track the number of domestic low carbon technologies supported – tracking those brought to market (< 100,000 units) and number of technologies scaled beyond 100,000 units, drawing on data from project level M&E report through the results framework. This will be a proxy measure for reaching commercial scale.

<u>Definition of Support:</u>
‘Support’ will be defined as that which is financed or incentivised from the International Climate Fund or wider HMG ODA budget. It will cover both bilateral, and multilateral spend.

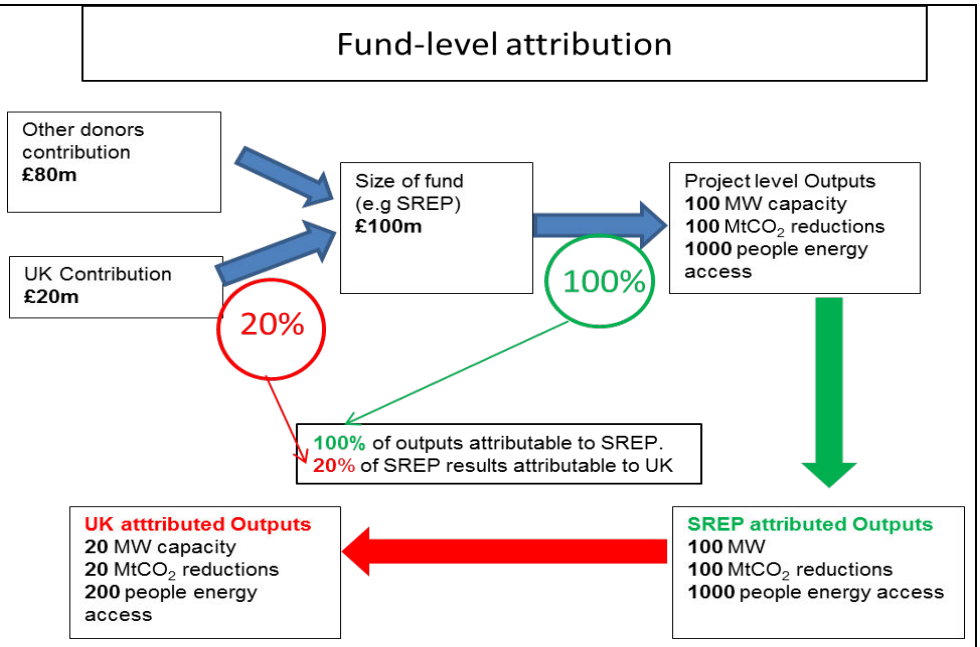
<u>Definition of Low carbon technologies:</u>
• Technologies improving energy efficiency, at least 15% improvement from baseline[1].
• Technologies based on renewable power or which lead to a switch from fossil fuel to clean energy

<u>Thresholds for Market Scale:</u>
The current threshold proposed is to disaggregate the indicator between</td></tr>
</table>

[11] This is based on the IFC and ADB thresholds.

	projects installing units above and below 100,000 units. This benchmark for market scale can be easily revisited, and it may be appropriate to have different levels for different regions and technologies. This can be informed through top down/global level detail on the commercialisation and penetration of technologies. **Calculation Methodology:** The target results for the indicator will be based on expected results from the business case project appraisal. The indicator will report the absolute number of low carbon technology units installed, reporting progress for each year of the project – this is an absolute measure and so no calculations are required. In some instances, where data available is based on household surveys, simplifying assumption made that 1 unit of domestic low carbon technology is adequate for one family dwelling.
Rational	The ICF is also focused on achieving transformation – supporting new and innovative technologies and accelerating technology learning and driving down technology costs through development, deployment and commercialisation. Monitoring the level of commercial innovation will provide an estimate of the influence of the ICF in supporting transformative technologies – as well as an indicator on technology uptake providing a direct measure of project success.
Reporting Organisation	HMG Project Managers
Country office role	**For Bilateral projects** - country offices will be required to report throughout programme implementation. This information ought to be generated in any case as part of their corporate compliance responsibilities. DFID CED will also seek support from EvD in quality assuring the data received. **For projects delivered through MDBs and others** – aims are to align M&E systems.
Data source	Individual project data.
Data included	Absolute number of low carbon technology units installed. If this is not available numbers of households with technology installed may be used as proxy (if assumption that one household = one unit is deemed suitable). If the number of households with low carbon technology installed is used as a proxy please note this in the ICF results template. Any comments can usually be added into the free text columns on the far right of each ICF results template.
Formula/Data calculation (including attribution rule)	**Accounting for the project level indicator:** The indicator will report on the uptake of low carbon technologies measured as an absolute number of units installed volume. Where this information is not known suitable proxies may be developed (i.e. if detail on number of households targeted, assume number of households is a suitable proxy for number of units installed).

	If the number of households with low carbon technology installed is used as a proxy please note this in the ICF results template. Any comments can usually be added into the free text columns on the far right of each ICF results template. The target results for the indicator will be based on expected results from the business case project appraisal. **<u>Attribution:</u>** Where HMG are only funding part of the project, benefits (units installed) should be calculated as a pro-rata share of public funding. For example, if we are funding 10% of a programme that installs 100 units of a low carbon technology, we should claim that 10 of these are attributable to DFID. For an individual project there may be a rational to deviate from this rule – for example if UK funds have with certainty leveraged in more benefits. Any attribution methodologies that diverge from the simple pro-rata rule above need to be approved in the business case for an individual project and flagged in the ICF results templates when reporting. **Fund-level attribution** (i.e. at point of UK investment) should be applied for reporting expected and actual results and headline results/figures used in Business Cases (to ensure all projects can report on a consistent basis). This method involves sharing results across all donors that contribute to a fund. All results are attributable to the relevant fund (e.g. CIFs, CP3, GAP) regardless of whether these funds blend with other sources of finance in implementing projects at levels below the point of UK investment. For example, if the UK invests £25m into a fund that totals £100m of public money, the UK would claim 25% of the results from that investment. This applies to all results. The long term ambition is to develop the data availability to enable all projects to use the lowest/most direct level of attribution possible in the future (i.e. project level). Therefore, advisers should be working to develop sufficient data to calculate project level results reports, and where possible, provide this information now alongside headline Fund level results. To note, the distinction between attribution at the project level and at the Fund level (or at point of UK investment) is only an issue where the UK is investing in funds where there are multiple investment levels.

<table>
<tr><td></td><td> 
</td></tr>
<tr><td>Worked Example</td><td><u>Increase in uptake of energy efficient appliances Example</u>;
Energy Efficient light bulbs replacing inefficient light bulbs

Project aims to install 10,000 energy efficient light bulbs.

Expected results = 12,000 units

In year 1, 3,000 units are installed.
Year 1 results = 3,000 units

In year 2 an additional 4,000 units are installed.
Year 2 results = 4,000 units.

In year 3 an additional 5,000 units are installed.
Year 3 results = 5,000 units.

Total (cumulative) units installed = 12,000 units</td></tr>
<tr><td></td><td>Results are attributed at the point of UK investment (Fund level) and shared across all donors that contribute to a fund.</td></tr>
<tr><td>Most recent baseline</td><td>The baseline should reflect the situation prior to ICF funding being provided and anticipated projections of what would happen without the ICF. For long running programmes the baseline should be taken as 2010 unless otherwise stated. The baseline should align with the economic appraisal in the project design.</td></tr>
<tr><td>Good performance</td><td>Increase in numbers of technologies supported in line with expected results.</td></tr>
<tr><td>Return format</td><td>Absolute number of individual low carbon units installed.</td></tr>
<tr><td>Data dis-aggregation</td><td><u>Data to be disaggregated as part of workings and Quest number provided:</u></td></tr>
</table>

	Disaggregation of the following variables will not be collected as part of the ICF results template. Please include disaggregated data in your working documents and record the Quest number for these documents in the ICF results template. - Technology type - Scale i.e. those brought to market (<100,000 units) or number of technologies scaled beyond 100,000 units
Data availability	It should be possible for country offices and multilateral partners to report at least annually (to inform Annual Output to Purpose Reviews). CED will collate this information annually.
Time period/ lag	This will have to be worked through with country offices and multilateral partners. A time lag may be necessary to receive realise results, but in the interim expected results should be used.
Quality assurance measures	Methodologies will be scrutinised in the economic appraisal of projects at the Business case stage. We anticipate that there will be 3 layers of QA: country offices, CED, and EvD. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF results templates. Any comments can usually be added into the free text columns on the far right of each ICF results template. Further guidance should be available in the commissioning note.
Data issues	There may be varying degrees of quality of data, from data generated by large DFID projects with good quality, to that produced by multilateral partners with their origin in government partners' data systems, which is likely to be lower quality.
Additional comments	n/a
Lead	Statistical advisor: Alex Feuchtwanger (DFID) a-feuchtwanger@dfid.gsx.gov.uk Subject matter leads: Isabel van de Sand (DFID): I-Vandesand@DFID.gov.uk

<table>
<tr><td>Short title</td><td>ICF KPI 10: Value of ecosystem services generated / protected as a result of ICF support.</td></tr>
<tr><td>Type of indicator</td><td>Annual, £/year (flow of services from hectares protected in any given year):
Reporting of this KPI relies on a figure being produced for KPI 8.</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table>
<tr><th>Requirement</th><th>Summary</th></tr>
<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>Yes</td></tr>
<tr><td>Units</td><td>£/year</td></tr>
<tr><td>Attribution</td><td>Pro rata share of public funding</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>Projects operating across multiple locations should disaggregate the value of benefits by location.</td></tr>
</table></td></tr>
<tr><td>Rationale</td><td>The TEEB study (2009)[1] presented estimates that humanity globally loses ecosystem services with a capital value of $2tr-$4.5tr each year as a result of deforestation alone. As the benefits of the natural environment tend to be delivered for free, they are often neglected in decisions, especially where the parties who benefit from the environmental services are not those who benefit from the action which removes them e.g. deforestation by non-local companies – they will take the benefit from the sale of timber and future use of the land, but do not compensate populations living locally for reduced access to products from the forest, or increased flood risk.

The TEEB study also highlights the role of forests in the income of rural poor, suggesting that (based on analysis across India, Indonesia and Brazil) between 47% and 89% of the effective income of the rural poor is delivered for free by nature, implying significant real losses are likely for such groups when deforestation occurs without work on alternative livelihoods. While we are looking to update this dataset with new valuation figures for ecosystem services in different habitats and biomes, we have no reason to believe that the role of forests has changed substantially for the rural poor in the developing world.

Whilst the “Forest Dependent People” indicator (ICF KPI 3) focuses on this livelihood issue specifically, valuing ecosystem services attempts to capture more broadly the value of the range of benefits (forest) ecosystem provide to society for free. It will not ascribe these to particular population, where the benefit falls will depend on local topography, climate, land ownership etc. KPI 10’s main aim is to identify the wider benefits. Many non-carbon ecosystem services have a more local benefit than reduced CO_2 emissions. It will also reveal the wider benefit of protecting biodiversity and natural habitats, as global public goods which support the generation of ecosystem services.</td></tr>
<tr><td>Technical Definition / Methodological summary</td><td>Ecosystem services are the benefits we derive from the natural environment, as assessed through the framework established in the Millennium Ecosystem Assessment (2005). They are grouped into 4 categories: provisioning (e.g. providing a source of food, fuel and fibre), regulating (e.g. influencing the flow or quality of water, regulating the climate), cultural (e.g. aesthetic benefits) and supporting services (e.g. nutrient cycling). See the ‘additional comments’ section for a full explanation of ecosystem service categories.

A high-level indicator measuring the value of ecosystem services generated or preserved by investments on the ICF has been developed based on the</td></tr>
</table>

[1] http://doc.teebweb.org/wp-content/uploads/Study%20and%20Reports/Reports/Synthesis%20report/TEEB%20Synthesis%20Report%202010.pdf

	measurement and location of hectares of forest / habitat where deforestation has been avoided **(therefore using as inputs data already generated for KPI 8 – the hectares indicator).** This is combined with data on the per-hectare value of each service provided on a hectare of habitat – eg. the value of air quality maintenance offered by a hectare of rainforest in Costa Rica. Going through this process for as many ecosystem services as possible using the data available will provide a wider indicative estimate of the value protected and/or delivered, which provides benefits on a local, national, and global level. The broad methodology below disaggregates between the value of carbon and non-carbon ecosystem services, and outlines separate methods for reaching each figure. The reason for this is that HMG has a robust existing methodology for valuing carbon through the use of the BEIS International Carbon Price Series. This methodological approach does not exist for non-carbon ecosystem services. **For both approaches, lower-bound values are recommended for use at this point. This is applied to properly capture the level of uncertainty attached to figures, in an area where existing data on £/ha ecosystem service values for habitats is scarce.** **A: Carbon Ecosystem Services** For carbon ecosystem services, the method used depends on whether the hectares in question have been protected versus restored – protecting an existing carbon stock will entail a different level of carbon from the restoration of carbon in degraded or new forest. **For carbon stock through forest protection:** **Step A1a:** Derive an estimate for per-hectare carbon stock for the project area – if data is not available from the project, generic figures are provided by IPCC[2], though this will increase the uncertainty around the value. **Step A2a:** Convert carbon stock protected/ conserved to an annualised flow. The method recommended for this is to divide the carbon stock protected equally across 20 years, the assumed lifetime of benefits. **Step A3a:** Multiply the carbon stock protected in the given year by the lower-bound carbon price for that year, using the BEIS International Carbon Price Series, ensure values are appropriately discounted at the global discount rate. **Step A4a:** Multiply £/Ha value by number of hectares where deforestation or conversion has been avoided. **For carbon sequestration through restoration:** **Step A1b:** Derive an estimate for £/Ha carbon sequestration based on project data. If project-level data is not available, use IPCC values for the relevant forest type/biome. [Put in link]. **Step A2b:** Multiply the carbon sequestration levels by the lower-bound carbon price for that year, using the BEIS International Carbon Price Series. **Step A3b:** Multiply £/Ha value by number of hectares restored. **B: Non-Carbon Ecosystem Services**

[2] IPCC, (2006), *IPCC guidelines for national greenhouse gas inventories*. Chapter 4: Forest Land.

	For non-carbon ecosystem services, the following outlines the 5 steps to take to transform hectare data into the value of ecosystem services protected/generated, recognising that this is a high-level approach that is primarily suitable for order-of-magnitude estimates at a more aggregate level. **Step B1:** Form an estimate of the proportion of habitat types within the area under consideration (the area where deforestation has been avoided as determined by KPI 8). This can be drawn from ecological literature or estimated using program knowledge of the local area. For an example of this, see the Worked Example section. **Step B2:** Use value transfer based on the Economics of Ecosystems and Biodiversity (TEEB) Ecosystem Services Value (ESV) database (developed in 2010) to form an order-of-magnitude estimate of the value of services per hectare per year provided by an ecosystem broadly representative of the area under consideration. The ESV database holds 1,310 data points on the value of 22 different ecosystem services across 10 habitat types. Some 582 have been peer-reviewed as being of sufficiently robust to use in value transfer from one location to another. An accompanying document [attached] provides lower-bound values for specific ecosystem service values of different biome types. [The values have been updated to 2018 £ figures, and will be updated annually to reflect inflation].  de Groot 2012 Evidence Appendice **Step B3 (Optional):** Derive values for ecosystem services specific to the location under consideration, if available. • This is the most resource-intensive step of the process, and the level of time committed to this step will be dependent on the analytical capacity of ICF programme teams. • We are looking to significantly reduce the analytical resource necessary for this step through an update to the ESV database – this will ensure that all robust location-specific ecosystem service values are available to ICF analysts in a single searchable database. The update is expected to be completed by April 2020. **Step B4:** Derive a monetary value for the ecosystem services generated by the likely alternative land use without the ICF to ensure additional benefits are captured. • This step assumes that the non-monetised/able ecosystem benefits generated by the alternative land-use are negligible. **Step B5:** Multiply the per-Ha value by hectare figures provided by KPI 8 to reach an overall order-of-magnitude estimate for KPI 10. The values of carbon and non-carbon ecosystem services are then added together to give a total value for the flow of ecosystem services from hectares protected or restored through ICF support. We envisage this method being used by HMG ICF analysts, with input (most likely on Steps B1 and B4) from project partners and country offices. Further information on how to approach the reporting of this indicator is provided through in the Worked Example section.

	As mentioned above, it is likely that after an update to the ESV database currently underway, Step B3 will be a much less resource-intensive undertaking, as it would simply involve a search of the ESV database for values specific to the location under consideration. The ESV database will also be updated on an annual basis with new peer-reviewed location-specific estimates for ecosystem service values – this will allow reporting of the KPI to potentially be undertaken by project leads. **Until the ESV database update is completed in March 2020, Step 3 should be skipped unless analytical capacity allows.** This indicator will be generated based on the data already requested of programme managers e.g. annual estimate of the number of hectares maintained at their baseline level and/or any improvements in the quality of forests in the intervention countries as a direct result of the programme under review etc. As with other indicators programmes will be encouraged to report against indicators over time so this indicator would be updated with this reporting over time. As this method relies on KPI 8 data as an input, the risks of leakage and non-permanence (where impacts are not sustained beyond the program lifetime) will have already been accounted for. As such, leakage and non-permanence should not be considered when deriving a value for the total ecosystem services generated or protected.
Country office role	To be agreed but it could involve validation of the results reported by project managers. Country offices could also assist with assumptions for the business as usual scenario i.e. in the absence of the ICF
Data sources	TEEB Ecosystem Services Valuation (ESV) Database – 1310 data points on the value of ecosystem services across the world, disaggregated across 10 biomes and 45 ecosystems. 582 of these have been cleared for use in value transfer by peer review. An overview of biome-level ecosystem service values for 10 biomes is available at https://www.sciencedirect.com/science/article/pii/S2212041612000101 Further location-specific data not captured by the TEEB database is available in caches such as the Environmental Valuation Reference Inventory, the WAVES Knowledge Center and peer-reviewed journals. This data, when resources allow, would be derived and utilised by ICF analysts until a point where the TEEB database is updated to a high-quality standard.
Reporting organisation	Indicator reported by HMG
Data included	The results would estimate the value of ecosystem services generated by ICF spend. From year to year, it is likely that the ecosystem service valuation data on which the method relies is likely to improve, as more study results are added to the TEEB valuation database. As such, lower-bound values for each service, as well as the total economic value of a hectare of protected or restored habitat, should be re-appraised during each reporting year. This is not expected to be a capacity-intensive exercise, as lower-bound values for each service in each habitat will be easily convertible from the database.
Formula/Data calculation (including attribution rule)	Attribution rates will already have been applied to the figure reported for KPI 8. As such, no further attribution rates would be applied.

	Reported value = (Lower-bound per-hectare value of service) x (number of hectares of forest protected or generated through ICF support)
Worked example	A case study of the method in practice has been undertaken on the Cerrado biome, an area in Brazil where two ICF projects are currently in operation. This habitat encompasses 204.5m hectares, covering 21.3% of Brazil's territory. It is the 2nd largest biome in South America and is acknowledged as one of the world's biodiversity hotspots, with over 4400 endemic plant species. The biome is vital for Brazil's long-term sustainability in areas as diverse as agriculture, energy, water security and climate regulation. Despite this, it has been heavily affected by the spread of agriculture across the region since the 1960s, with just 47% of the biome retaining its natural vegetation in 2010. Habitat loss in in the region continues at 0.6% a year. **Method** **Step A – Carbon Ecosystem Services** This case study assumes that the counterfactual would be that the natural habitat would be converted to agriculture, with an assumed minimal carbon stock. Step A1 Estimates for the carbon sequestered annually by Cerrado natural habitat range from 1.2TC/ha[3] to 6.2TC/ha[4], with a median of 3.7TC/h – this converts to 13.55TCO_2e/ha. Step A2 Using the lower-bound BEIS International carbon Price for 2018 of £26 produces a per-hectare median estimate for carbon sequestration by Cerrado natural habitat of £352 (13.55T x £26). **Step B – Non-carbon Ecosystem Services** Step B1 To apply the data held in the ESV database to the Cerrado, first we estimate the habitat composition of an **average** hectare of Cerrado in its natural state. Based on relevant ecological literature[5], we make the assumption that this composition is 72% grassland, 24% grassland/forest transition (with the assumption of a 50/50 split), and 4% tropical forest. • We used tropical forest as the ESV forest indicator as it was most relevant to the tropical *dry* forest found in the Cerrado biome. However, there is not enough data available in the ESV database to differentiate between dry and moist tropical forest at this time, though they are likely to generate a sizably different set of ecosystem services. Step B2

[3] Abreu, R. C. R. et al. (2017) "The biodiversity cost of carbon sequestration in tropical savanna"
[4] Teixiera do Vale, A. and Felfili, J. M. (2005) "Dry Biomass Distribution in Cerrado *Sensu Stricto* Site in Central Brazil"
[5] Cardoso Da Silva, Bates (2002) - "Biogeographic Patterns and Conservation in the South American Cerrado: A Tropical Savanna Hotspot"

	To calculate an estimated figure for the value of each ecosystem service within our generic habitat, we use the median values provided by the TEEB database[6]. Median is used to increase robustness, as the effect of outliers does not skew the results. A simple formula is used in the case of the Cerrado: $0.72(\alpha) + 0.24((\alpha+ \beta)/2) + 0.04 (\beta),$ where α represents the grassland ecosystem service median value and β represents the tropical forest ecosystem service median value. This formula enables us to create an indicative baseline estimate of ecosystem service values for a hectare of the Cerrado. <u>Step B3</u> To increase the accuracy of our ES value estimate, we find a number of location-specific figures for the value of individual ecosystem services provided by the Cerrado and aggregate them. This is the most time-intensive step in the process. As such, the time committed to Step 3 will be dependent on the analytical capacity available. Results are shown in Column 2 of the table below. Cerrado-specific metrics are available for the following services: • Food – the per-ha value of pequi (*caryocar brasiliense*) harvest[7, 5]. • Climate regulation – the value of carbon sequestered annually on average by a hectare of Cerrado[8,9]. • Water flow regulation – the evapotranspiration services offered by Cerrado vegetation[5] • Natural hazard regulation – erosion prevention values for Cerrado soils[10] • Genetic diversity – the value of plant diversity in an area of the Cerrado[11] <u>Step B4:</u> The value of the standing forest is now compared to the counterfactual, ie the economic value obtained from deforesting the land for an alternative land-use. The most financially valuable alternative land-use is double-cropping soybean/corn agriculture – one crop is harvested after six months and immediately replaced with another crop, so the land is productive on a year-round basis. Analysis of the ecosystem services provided are sourced through relevant literature[12]. <u>Step B5</u> This step is dependent on estimates being produced for KPI 8. Ecometrica's analysis of an ICF project in the Cerrado estimated 784 hectares have so far been protected from deforestation through ICF support. This is the figure we combine with a per-hectare value to produce an estimate of KPI 10. **<u>Results</u>** Table 1 shows the resulting values using this method. The groups and subgroups of services reflect the approach proposed in the UK National Ecosystem

[6] TEEB: Ecosystem Service Value Database; https://www.es-partnership.org/services/data-knowledge-sharing/ecosystem-service-valuation-database/

[7] Zardo, R. N. and Henriques, R. P. B. "Growth and fruit production of the tree *Caryocar brasiliense* in the Cerrado of central Brazil", 2011.

[8] Abreu, R. C. R. et al. (2017) "The biodiversity cost of carbon sequestration in tropical savanna"

[9] Teixiera do Vale, A. and Felfili, J. M. (2005) "Dry Biomass Distribution in Cerrado *Sensu Stricto* Site in Central Brazil"

[10] TEEB for Business Brazil, Final Report (2014)

[11] Resende, F. M., Fernandes, G.W and Coelho, M. S. - "Economic valuation of plant diversity storage service provided by rupestrian grassland ecosystems", 2013.

[12] TEEB for Business Brazil, Final Report (2014)

Assessment[13]. The dashes in the table reflect areas where data is not currently available.

Table 1: Value of Ecosystem Services in the Cerrado Biome, Lower-Bound
(All figures are in £/Ha/year at 2016 price levels)

Ecosystem Services	Generic Cerrado-type Habitat	Cerrado-Specific	Final Generic/Specific Cerrado
Provisioning services	267	-	**267**
Food	59	-	**59**
Resources*	207	-	**207**
Freshwater	1	-	**1**
Regulating and Habitat Services	1147	729	**742**
Climate regulation	226	352	**352**
Air quality	2	-	**2**
Water flow regulation	7	7	**7**
Natural hazard regulation	2	45	**45**
Waste treatment	9	-	**9**
Genetic diversity**	899	325	**325**
Disease & pest regulation	2	-	**2**
Social & Cultural Services	3	-	**3**
Aesthetic	1	-	**1**
Recreation & Tourism	2	-	**2**
Cognitive benefits***		-	
Total Economic Value	1417	729	**1012**

** Resources includes TEEB sub-groups of raw materials, genetic resources, medicinal resources and ornamental resources*
***Genetic diversity figure includes TEEB sub-groups of nursery services, genetic diversity and biological control*
**** Cognitive benefits figure includes TEEB sub-groups of inspiration, spiritual experience and cognitive development*

We have used location-specific figures for ecosystem services where available. In the 'Final Generic/Specific Cerrado' column:

= Generic Cerrado-type habitat figure used
= Cerrado-Specific figure used

As Table 1 highlights, the climate regulation and genetic diversity services provided by the Cerrado are particularly valuable. However, we remain unable to value services such as air quality which potentially have a high value.
The sizable discrepancy between generic habitat and specific Cerrado estimates for the value of climate regulation are likely to be linked to the different methodologies utilised by different researchers and nations in the valuation of a tonne of C02. Another issue is the use of differing time frames and discount rates when converting a stock of carbon to a flow.

[13] UK National Ecosystem Assessment (2011) UNEP-WCMC, Cambridge.

Our lower-bound estimate of the total value of an average hectare of natural Cerrado vegetation is estimated at being in the region of £1010.

Value of conservation/ restoration

In order to estimate the net benefit of conserving or restoring Cerrado land we need to subtract the value of the next best alternative (the opportunity cost). In this case, the most valuable alternative land-use is double-cropping soybean/corn agriculture – one crop is harvested after six months and immediately replaced with another crop, so the land is productive on a year-round basis. The figures given capture, as much as possible, estimated per-hectare values for the ecosystem services provided by each of the two land-uses:

Table 3: Ecosystem Service Value of Cerrado Land-Use Options

Land-Use Designation	Value (2016 £ prices/ha/year)
Natural Cerrado Habitat	1012
Soybean/Corn Double Cropping	515

Soybean/corn double cropping creates an estimated £427/ha/year in value from food production. In addition to this, it offers other ecosystem services, some of which are captured here:

- water regulation - £17/ha/year
- natural hazard regulation - £107/ha/year

However, it is also responsible for a number of adverse agricultural impacts, which lower the value of the services provided by £36/ha/year. Cumulatively, these supplementary ecosystem services are valued by the TEEB for Business Brazil report at £88/ha/year[15]. Full sources, methods and assumptions for these figures are detailed in Annex IV. It is worth noting that double-cropping operations are only feasible in areas where the land is flat and water sources are plentiful.

Given the above figures, we estimate the economic value of ecosystem services provided by conserving or restoring an average hectare of natural Cerrado habitat at £497/ha/year. This is highly conservative, as uses the lower bound estimate of a large number of peer-reviewed international studies.

Sensitivity Analysis

As the lower bound is being utilised as the central estimate, the analysis set out below details median and high values for the hectare type under consideration, to estimate a range for the value.

Table 2: Sensitivity Analysis of Ecosystem Service Values for the Cerrado Biome

(All figures are in £/Ha/year at 2016 price levels)

	Median value	Lower bound	Upper bound	Number of Sources
Provisioning services	**418.0**	**267.9**	**666.7**	-

Food	129.0	59.2	198.8	-
Resources	247.7	207.3	336.9	24
Freshwater	41.3	1.4	131.0	6
Regulating & Habitat Services	**1506.8**	**742.1**	**2393.7**	-
Climate Regulation	704.5	352.3	1182.1	2
Air Quality	1.6	1.6	1.6	1
Water flow regulation	17	7.4	22.3	-
Hazard Regulation	79	45.1	112.9	-
Waste treatment	54.2	9.2	99.3	6
Genetic Diversity	649.0	325.0	974.0	-
Disease & Pest Regulation	1.5	1.5	1.5	1
Social & Cultural Services	**51.5**	**2.4**	**1739.5**	-
Aesthetic	31.2	0.7	419.6	5
Recreation & Tourism	20.3	1.4	1096.4	24
Cognitive Benefits	0	0	0	-
Total Economic Value	**1976.3**	**1012.4**	**4576.4**	**-**

The above table shows an overall range for TEV of a hectare of natural Cerrado habitat of -95% to +132%. This sizable range reflects the small amount of data currently available.

To produce a total estimate of KPI 10 for the Cerrado project, our per hectare economic value of ecosystem services protected or generated (£497/ha) is multiplied the number of hectares where deforestation has been avoided by the project in the reporting year (764ha in 2016 according to Defra's ICF monitoring data). This produces a KPI 10 value for the Cerrado project for the year 2016 in the region of £380,000

These findings reflect the basis of the economic case for conservation, and provide us with a simple and robust monitoring metric for KPI 10 in the Cerrado biome.

Most recent baseline	There is no current baseline (this would be calculated within the indicator – i.e. the value of ecosystem services in the absence of the ICF as the counterfactual). However the TEEB interim report did highlight the global magnitude of the ecosystem service losses associated with current levels of deforestation at $2tr - $4.5tr p.a. (capital value).
Good performance	Protecting forests of high value to people should highlight the benefits of natural capital protection at the local as well as the global level, a high number could help show the benefits of the ICF (and forest protection more generally) to country partners.
Return format	Monetary value of ecosystem services generated or protected
Data dis-aggregation	Data will be disaggregated by: - Country

	- Habitat type
Data availability	Will be assessed as the transfer function is developed, however we know the approach is feasible as it has been done before for the TEEB study.
Time period/ lag	Assuming applied offsite, the value of the indicator could be updated as and when update to the input data (specifically KPI 8) are available (eg. studies are undertaken to value ecosystem services in the specific area under consideration).
Quality assurance measures	The work by researchers in this area will need to be well peer reviewed, as value transfer remains to an extent on the academic frontier. If reporting officers have any concerns about the quality of data or any points that they think ICF analysts should be made aware of, then please note this in the ICF (and DRF) results templates. Any comments can usually be added into the free text columns on the far right of each template. Further guidance should be available in the commissioning note.
Data issues	Valuation of ecosystem services is a complex field (especially at large geographical scales due to the differences in £/Ha service provision across a landscape), therefore it is likely that this indicator will only be able to provide information on the order of magnitude of ecosystem service benefits provided at the level of the ICF as a whole. A discussion of the issues around large scale assessments of ecosystem service values will be published in the TEEB Quantitative Assessment (forthcoming). A key issue is that having a single transfer function, assumes we can identify the variables which will affect both the ecological functioning of an ecosystem and the value of the services it provides and use these to adjust and transfer values from existing studies. This of course relies on the both the quality and quantity of studies available, and implies as more work is carried out, the way in which such assessments are carried out may develop and evolve. **In future, we would like to improve this indicator by:** A clear next step for improving the rigour of our estimates is to update the TEEB ESV database to include location-specific ecosystem service values published more recently than 2008 (when the database was first published). This will increase both the ability of ICF analysts to find robust ES values for a specific location and also the accuracy of estimates for a generic habitat. This is especially pertinent when we account for the huge number of valuation studies that have been published between 2008 and the present. Currently this method does not account for differences in the value of ecosystem services generated based on surrounding land-use, proximity / density of human population / infrastructure, relative wealth of population, habitat quality. This is an issue which we will be looking to address in due course. It also does not differentiate between different levels of degradation, and how this impacts the provision of services by an area of natural habitat. Further debate is recommended on the relationship between the condition of the natural stock and the level of ecosystem services provided by that stock - with a focus on whether the service/degradation relationship is linear or exponential.

Additional comments	**Ecosystem service categories**[14] *Provisioning* Food Water Resources (medicinal, raw materials) *Regulating* Air quality maintenance Climate regulation Natural hazard regulation Waste-water treatment Erosion prevention Disease and pest regulation *Supporting* Genetic diversity maintenance Pollination* *Cultural* Tourism Education and cognitive development Recreation Aesthetic appreciation *Not considered a *final* ecosystem service. Only final services are valued to avoid double-counting of benefits.
Leads	Statistical advisor: Cecilie Andersen (DFID) C-Andersen@dfid.gov.uk Subject matter leads: Moray Fraser (Defra): moray.fraser@defra.gov.uk

[14] http://www.teebweb.org/resources/ecosystem-services/

<table>
<tr><td>Short title</td><td>ICF KPI 11: Volume of public finance mobilised for climate change purposes as a result of ICF funding

Please note that this methodology had some minor changes made to it in August 2016. These are largely clarification points around definitions for commitments and climate-relevance, in line with the Technical Working Group (2015) common understanding of the scope of mobilised climate finance and developments at the OECD DAC and other international organisations.</td></tr>
<tr><td>Type of indicator</td><td>Cumulative (individual years summed to total): report annual in-year totals only i.e. the amount legally committed in that year, summed at the end of the results template (logframe) to give a cumulative total for the current spending review period, the life of the programme and where results will occur outside the life of the programme for total programme benefits.</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table>
<tr><th>Requirement</th><th>Summary</th></tr>
<tr><td>Is this a DRF indicator?</td><td>No</td></tr>
<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>Yes</td></tr>
<tr><td>Units</td><td>£ legally committed in the 12 month period</td></tr>
<tr><td>Attribution</td><td>Pro-rata share of public funding</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>• Origin of finance (i.e. donor/multilateral/developed country finance, vs partner country/developing country finance)</td></tr>
</table>
</td></tr>
<tr><td>Technical Definition / Methodological summary</td><td><u>Definition of public finance?</u>

Public finance transactions are defined as those from official (i.e. government) sources outside of the UK. This could include finance from other donors and partner governments, UN agencies and multilateral or regional development banks and investment agencies such as CDC or DEG. It excludes Sovereign Wealth Funds, private banks and other private finance defined in the note on Mobilising Private Finance.

The exact classification should be based on the OECD DAC definition: Official transactions are those undertaken by central, state or local government agencies at their own risk and responsibility, regardless of whether these agencies have raised the funds through taxation or through borrowing from the private sector. This includes transactions by public corporations i.e. corporations over which the government secures control by owning more than half of the voting equity securities or otherwise controlling more than half of the equity holders' voting power; or through special legislation empowering the government to determine corporate policy or to appoint directors. Private transactions are those undertaken by firms and individuals resident in the reporting country from their own private funds[1].</td></tr>
</table>

[1] OECD DAC (2013), "Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire", OECD. Paragraph 13.

	Basis of measurement: When should finance be reported? Public finance should be reported at the point at which it is **committed, in the calendar year**. This should be based on the OECD DAC definition of a commitment: *A commitment is a firm written obligation by a government or official agency, backed by the appropriation or availability of the necessary funds, to provide resources of a specified amount under specified financial terms and conditions and for specified purposes for the benefit of a recipient country or a multilateral agency. Commitments are considered to be made at the date a loan or grant agreement is signed or the obligation is otherwise made known to the recipient (e.g. in the case of budgetary allocations to overseas territories, the final vote of the budget should be taken as the date of commitment)*[2]. **Origin of public climate finance?** (i.e. definition of donor/multilateral/developed country finance, vs partner country/developing country finance). Public finance can be from both donor/ developed country organisations, multilateral organisations, and also partner/ developing country institutions. The UK government considers it important to mobilise all sources of climate finance, however it is also valuable to understand from which origin and to which recipient finance is flowing. For this reason, we request you disaggregate the information into the four classifications below (and also provide more disaggregated information, as noted in the section below). International reporting on development finance to the OECD DAC has clear definitions, which also apply for this KPI: • Donor finance = OECD DAC bilateral finance providers (based on OECD DAC membership[3]), • Multilateral finance = OECD DAC multilateral finance (based on ODA eligible international organisations[4]), • Developing country finance = ODA eligible countries (based on the OECD DAC list[5], which is periodically reviewed). • Non-DAC donors = other finance providers, excluded from the definitions above. **Recipient of public climate finance?**

www.oecd.org/dac/stats/documentupload/DCD-DAC(2013)15-FINAL-ENG.pdf

[2] OECD DAC (2013), "Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire", OECD. Paragraph 90.
www.oecd.org/dac/stats/documentupload/DCD-DAC(2013)15-FINAL-ENG.pdf

[3] OECD DAC members: http://www.oecd.org/dac/dacmembers.htm

[4] OECD DAC Annex 2 List of ODA-eligible international organisations: http://www.oecd.org/dac/stats/annex2.htm

[5] OECD DAC ODA eligible international organisations: http://www.oecd.org/dac/stats/annex2.htm

	Developing country recipients of public fiannce are definied as ODA eligible countries (based on the OECD DAC list, which is periodically reviewed[5]). [6] **<u>Climate definition: What do we mean by 'for climate change purposes'?</u>** Finance is defined as climate change-related based on the OECD DAC Rio Markers definitions for climate change adaptation and mitigation. All ODA spend is qualitatively assessed and 'tagged' under these definitions for ODA reporting, and these headline definitions are internationally recognised and drawn on by many other organisations and parties in their reporting on climate finance. • **OECD DAC definition of climate change mitigation:** An activity that… contributes to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration. • **OECD DAC definition of climate change adaptation:** An activity that… intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience. This encompasses a range of activities from information and knowledge generation, to capacity development, planning and the implementation of climate change adaptation actions. For further information on the OECD DAC definition, eligibility criteria and indicative guidance please see the references noted below. Definitions and eligibility criteria from other relevant international organisations (e.g. Joint MDB Typology of Mitigation Activities, and the Intergovernmental Panel on Climate Change (IPCC), may also be appropriate to apply. In addition, climate finance should exclude finance for coal-related power generation, except if related to Carbon Capture and Storage and/or Carbon Capture and Use (based on TWG, 2015). **<u>Quantification: How should public finance be quantified?</u>** All financial instruments are accounted for at cash face value, i.e. the full cash value of a loan committed (based on TWG, 2015). In terms of the amount of finance reported you should exclude any part of the project which is easy severable and not related to climate change e.g. if the project is working with SMEs around

[6] Note – whilst the classification of "developed" and "developing" countries is unclear in the context of the UNFCCC 100bn goal, however most donors, including the UK to date have for the prupose of their individual reporting to UNFCCC defined developing countries as ODA eligible countries.

	improving their practices generally to achieve cost-savings but some of that includes energy efficiency then you should include that part which relates to energy efficiency. In addition other finance from individual countries and organisation's may have their own approaches to quantifying the climate-specific volume of an activity, i.e. in line with individual party reporting to the UNFCCC and the joint MDBs' climate component approach, which should be followed. **Definition of "mobilised"?** Mobilised is often also referred to as leverage. It is 'the process which occurs when the use of specified resources for a given objective causes more financial resources to be applied for that objective than would otherwise have been the case'. This definition requires that mobilised funds are either **additional** funds or are existing **funds diverted from another (more fossil-fuel intensive) use** to this objective. Mobilised resources could be: • Upfront co-financing below the point of UK investment i.e. resources committed to the project from other donors or partner governments at the time of project approval. See attribution section for details. • Subsequent co-financing below the point of UK investment i.e. resources mobilised after the project has been operating e.g. where early success encourages others to contribute. **What about projects which HMG has indirectly influenced e.g. replication projects?** These are too remote to claim to have mobilised. They will be captured via other indicators e.g. the International Climate Fund "influence" indicator. **Additionality: What do we mean by 'as a result of DFID/HMG funding'?** We need to demonstrate that the public funding would not have been provided in the absence of HMG funding. This assessment of **additionality** will require the judgement of the project/programme officer. HMG will be more likely to be able to claim additionality if it designed and led the project. **Which currency exchange rate to use?** Most project financing plans and data sources currently report international finance flows in USD ($). Finance is to be reported in GBP (£) for this KPI. The appropriate exchange rate to apply depends on the

	information available. As such, we propose the following hierarchy: 1) Use the exchange rate for the specific transaction, converting the currency on the rate at the time the finance was committed, if formalised/known; or, 2) Use the OECD exchange rate: The basis of measurement in DAC statistics is the US dollar. Data reported to the OECD DAC in other currencies are converted to dollars by the Secretariat. The list of exchange rates is published[7] annually and represents an average of the yearly exchange rates. These are however only for donor currencies, therefore, for other currencies; 3) Use the HMRC Average Annual spot rates for the year[8].
Rationale	On its own, ICF/HMG public finance will be insufficient to deliver our climate change objectives. This will require substantial amounts of public and private finance from other sources. This indicator seeks to measure the amount of 'other' (i.e. non ICF/HMG) public money 'mobilised' or catalysed for climate change as a result of HMG funding. Mobilisation of *private* finance will be assessed using a separate indicator.
Country office role	This will need to be done by country offices and other central departments e.g. PSD department and Regional Department programmes.
Data sources	Some data will be available directly from DFID programme data e.g. other donor contributions to programmes. However, this data will need to come from DFID project/programme officers: ARIES allows us to record other donor finance for joint funded programmes but not whether this is public or private. ARIES may also fail to record any subsequent co-financing. This information will need to be kept up to date by liaising with programme managers. In addition, the project/programme officer will need to make an assessment of the extent to which DFID finance has encouraged others to contribute/increase their contributions. We cannot automatically assume that all other public finance contributions are mobilised by DFID money. Partner country expenditure can be sourced from government systems (e.g. ministry of finance, ministry of environment).
Reporting organisation	DFID.
Formula/Data calculation	1. Identify HMG finance contribution 2. Identify total committed public co-finance and its origin (i.e.

[7] http://www.oecd.org/dac/stats/data.htm (under Data Tables)

[8] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/518917/average_spot_rates_310316.csv/preview

(including attribution rule)	other DAC donor/multilateral/international organisation/non-DAC or partner government finance) 3. Identify proportion of total public co-finance that would have been provided in the absence of DFID funding. The remainder provides an estimate of mobilised public finance. Count only public finance if it is truly additional or diverted to climate from other sources. See example 3 below. Where HMG are only funding part of the project with other donors who also came on board initially then it needs to share the public sector leverage claim (see Worked example 4 below). **Fund-level attribution** (i.e. at point of UK investment) should be applied for reporting expected and actual results and headline results/figures used in Business Cases (to ensure all projects can report on a consistent basis). This method involves sharing results across all donors that contribute to a fund. All results are attributable to the relevant fund (e.g. CIFs, CP3, GAP) regardless of whether these funds blend with other sources of finance in implementing projects at levels below the point of UK investment. For example, if the UK invests £25m into a fund that totals £100m of public money, the UK would claim 25% of the results from that investment. This applies to all results. The long term ambition is to develop the data availability to enable all projects to use the lowest/most direct level of attribution possible in the future (i.e. project level). Therefore, advisers should be working to develop sufficient data to calculate project level results reports, and where possible, provide this information now alongside headline Fund level results. To note, the distinction between attribution at the project level and at the Fund level (or at point of UK investment) is only an issue where the UK is investing in funds where there are multiple investment levels.
Worked example	1. DFID agree to match partner government funding for a programme to distribute efficient lightbulbs. Without the DFID contribution, the programme would not go ahead (a key element here is whether DFID designed and led the programme). In this example, a £10m DFID contribution leverages £10m additional public funding from the partner government. 2. A solar power station costing $550m is being considered as an alternative to a coal-fired power station costing $200m which the Government would have co-financed providing the same amount of power. The remainder of the finance is from the private sector. The local Government is putting in $100m to the solar power plant. In this example, a $50m DFID grant mobilised $100m of local Government finance as we can demonstrate that the extra $100m would otherwise have been spent on a non-climate use and would not have occurred without DFID's $50m.

Most recent baseline	The baseline should reflect the situation prior to ICF funding being provided. For long running programmes the baseline should be taken as 2010, unless otherwise stated.
Good performance	High quantities of mobilised public finance can demonstrate that an initial DFID contribution has encouraged others to contribute (e.g. by reducing risks and/or overcoming barriers or influence).
Return format	Quantity of public finance mobilised (£), with explanatory text justifying assessment of additionality. For further disaggregation information see below.
Data dis-aggregation	<u>Data to be disaggregated and reported in the ICF results template:</u> - Origin of finance i.e. DAC donor/multilateral/international organisation/non-DAC or partner government finance - Theme finance is supporting i.e. adaptation, mitigation or both <u>Data to be disaggregated as part of workings and Quest number provided:</u> Disaggregation of the following variables will not be collected as part of the ICF results template. Please include disaggregated data in your working documents and record the Quest number for these documents in the ICF results template. - Origin of finance, detailed breakdown of origin above i.e. which DAC donor/multilateral/international organisation/non-DAC or partner government finance came from - Type of finance e.g. concessional debt, non-concessional debt, grant funds, equity and guarantees, donor financed climate funds etc.
Data availability	Programme officers should be aware when other donor finance is added to DFID-funded programmes, either directly or via communication with programme managers. Data on partner government contributions should be available at least annually. Data should be reported to the centre when available, or at a minimum, annually but care needs to be taken about not reporting the same public finance more than once.
Time period/ lag	There may be a lag between other donors pledging finance, and finance being committed to the programme. Finance should only be counted as 'mobilised' once it is committed (see OECD DAC definition above).
Quality assurance measures	Programme officers are asked to report on definitions, sources of data and assumptions regarding additionality, to allow central QA to ensure all reporting is consistent with the methodology note. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF (and DRF) results templates. Any comments can usually be added into the free text columns on the far right of each template. Further guidance should be available in the commissioning note.
Data issues	Assessment of **additionality** (i.e. the extent to which DFID money has encouraged others to contribute) will need to be done

	on a case-by-case basis and will require the judgement of the project/programme officer. Need to avoid double-counting, for example the UK should not claim leverage of German money if the Germans are likely to do the same or MDBs' claiming to have mobilised UK money. This may be best done by liaison between donors. This becomes important if these indicators are to be aggregated at EU, OECD DAC or UNFCCC level. It is important to check that two different HMG funded programmes are not claiming to have mobilised the same $ of public finance. If in doubt about this, just make a note in your report of the double reporting risk. ARIES allows us to record other donor finance for joint funded programmes but not whether this is public or private
Additional comments	Key references: OECD DAC (2013c), "Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire – Addendum 2"[9], Annex 18 Rio markers. [NOTE THERE IS EXPECTED TO BE AN UPDATE.. – FOR DFID TO UPDATE] OECD DAC (2016), "Indicative table to guide rio marking by sector/sub-sector: Climate change adaptation and climate change mitigation"[10]. Joint-MDB (2015a), "Common Principles for Climate Mitigation Finance Tracking"[11] Joint-MDB (2015b), "Common Principles for Climate Change Adaptation Finance Tracking"[12] Technical Working Group (2015), "Accounting for mobilized private climate finance: input to the OECD-CPI Report", September 2015[13].
Leads	Statistical advisor: Alex Feuchtwanger (DFID) a-feuchtwanger@dfid.gsx.gov.uk Subject matter lead: Seb Meaney (DFID) S-Meaney@DFID.gov.uk

[9] www.oecd.org/dac/stats/documentupload/DCD-DAC(2013)15-ADD2-FINAL-ENG.pdf
[10] http://www.oecd.org/dac/environment-development/Indicative%20table%20to%20guide%20Rio%20marking%20by%20sector.pdf
[11] http://www.worldbank.org/content/dam/Worldbank/document/Climate/common-principles-forclimate-mitigation-finance-tracking.pdf
[12] http://www.eib.org/attachments/documents/mdb_idfc_adaptation_common_principles_en.pdf
[13] http://www.bafu.admin.ch/dokumentation/medieninformation/00962/index.html?lang=en&msg-id=58589

<table>
<tr><td>Short title</td><td>ICF KPI 14: Level of institutional knowledge of climate change issues as a result of ICF support

Please note that supporting evidence of subjective scores also needs to be reported. This should take the form of a qualitative/narrative report against the scorecard questions setting out the evidence for any change in scores over time.</td></tr>
<tr><td>Type or Indicator</td><td>Scorecard</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table>
<tr><th>Requirement</th><th>Summary</th></tr>
<tr><td>Is this a DRF indicator?</td><td>No</td></tr>
<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>No</td></tr>
<tr><td>Units</td><td>Scores per question i.e. 0, 1 or 2
Total of question scores i.e. 0 to 10</td></tr>
<tr><td>Attribution</td><td>NA</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>• Individual question scores</td></tr>
</table>
</td></tr>
<tr><td>Technical definition/ Methodol-ogical summary</td><td>This indicator is designed to capture the extent to which climate change planning is informed by knowledge of climate change in general and specific knowledge relating to methodologies for integrating or mainstreaming climate change into planning, and the extent to which planning staff are trained in relevant areas.

The indicator can be used to assess the performance of an individual capacity building programme, through evaluation of the target system (e.g. ministry, sector, institution) at the beginning, during, and at the end of the programme.

The indicator may also be used to assess institutional knowledge in systems targeted by multiple programmes.

Assessments will need to be supported by evidence that any improvements are attributable to the programme(s) in question.

The indicator is viewed as an outcome indicator, based on DFID's Theory of Change for Adaptation, as it examines the outcomes at the level the target system resulting from the outputs of a programmes.

The indicator takes the form of a scorecard based on five criteria relating to the level of knowledge and training in climate change in general, and in mainstreaming methodologies in particular, among staff involved in planning. These criteria are expressed as questions that ask to what extent the criteria have been met: not at all ("NO"), partially ("PARTIAL"), or to a large extent/completely ("YES").

An overall score is calculated, as the number of "PARTIAL" answers plus the number of "YES" answers, with each of the former scoring 1 and each of the latter scoring 2, giving a maximum score of 10.

The indicator scorecard is set out in the table below.</td></tr>
</table>

CRITERIA/QUESTIONS	NO (0)	PARTIAL (1)	YES (2)
1. Does planning involve individuals with some awareness of climate change?			
2. Does planning involve individuals with formal training in climate change issues?			
3. Does planning involve individuals who have attended accredited courses on climate change, development, planning and "mainstreaming" issues?			
4. Is integration of climate change into planning overseen by individuals with in-depth knowledge of integration/mainstreaming processes?			
5. Are numbers of people with required training involved in planning processes adequate?			
SCORE (No. of "YES" answers x 2, plus no. of "PARTIAL" answers x 1)			

Methodological points to note

1. This indicator has been constructed to be a "general" climate change indicator that may be applied to either adaptation or mitigation / low-carbon development. "Climate change issues" therefore may be issues related to adaptation and/or mitigation/LCD. It is not recommended that assessment of adaptation and mitigation is combined in a single assessment, as performance may be significantly different in these two areas, and the lack of specificity would make the indicator of limited use.
2. The indicator is used to **assess systems targeted by one or more programmes**, and is an outcome indicator, which will be assessed at the beginning, during, and at the end of a programme (where the outcomes resulting from a single programme are to be assessed), or at regular intervals (e.g. annually) where the cumulative results of multiple programmes are to be assessed. Where the indicator is applied to a targeted system, improvements in scores will need to be complemented by supporting qualitative evidence in order to demonstrate attribution (e.g. narratives, testimonials, other evidence of causal relationships).
3. Awareness of climate change [Question 1] refers to general awareness of the existence of climate change and its potential impacts at different scales.
4. Formal training in climate change [Question 2] includes graduate-level training or professional training that includes climate change components/content. Such training may focus on the scientific

	aspects of climate change without extending to the implications of climate change for development. 5. Accredited courses [Question 3] are courses that have been approved by DFID, and should address the links between climate change and development, with attention to adaptation and mitigation issues as relevant in the context of the ICF, as well as issues relating to the integration or mainstreaming of climate change into development planning and practice. 6. Integration or mainstreaming [Question 4] is an emerging field of practice and knowledge in its own right, and it is important that those responsible for ensuring that climate change is addressed in planning have sufficient knowledge of mainstreaming processes. Mainstreaming typically involves screening of initiatives for climate risks; commissioning an external climate risk assessment (CRA) for high-risk initiatives; evaluating the viability of high-risk initiatives; identifying, prioritising and implementing risk reduction (mitigation or adaptation) measures for initiatives that are viable but where risks have been identified; the development of monitoring and evaluation frameworks for tracking progress; and evaluation and learning. 7. Climate change mainstreaming and effective risk management will require that a sufficient number of planning staff, at a variety of levels, understand climate change contexts, risks and mainstreaming processes, and are able to address these in the development and implementation of planning processes [Question 5]. Guidance on answering the questions that make up the indicator is provided in the table below.

	Conditions necessary for answer of:		
Q	**NO**	**PARTIAL**	**YES**
1	There is little or no general awareness of climate change issues among planning staff.	Some staff are aware of climate change but awareness is limited, in terms of both numbers of staff and depth of knowledge. Climate change is still seen by some/many as an environmental issue.	There is a high level of awareness of climate change and (i) what it means in terms of potential risks to development, and/or (ii) mitigation issues including stabilisation targets (2°C) [depending on adaptation or mitigation assessment focus].
2	No staff have any formal training in climate change.	A few staff have training in general climate change issues (e.g. science, policy), but they are not in key roles and impact of their knowledge is limited.	Many and/or key staff have formal climate change training (e.g. science, policy, etc).
3	No staff have attended accredited courses.	A few staff have attended accredited courses, but impacts are limited due to their not being in key positions.	Key staff in positions of influence have attended accredited courses.
4	No staff have experience, knowledge or training in mainstreaming processes.	Some staff have experience, knowledge, or training in mainstreaming, but they do not have responsibility, or are not empowered, to promote mainstreaming.	Mainstreaming of climate change is overseen by staff with relevant experience, knowledge or training (see previous Qs), who are empowered to integrate climate change into planning.
5	The number of staff with relevant training in climate change issues is small (or zero), and these staff have very limited impact.	A proportion of staff have relevant training, but they are insufficient in number to ensure routine integration of climate change into planning.	Staff are generally familiar with climate change issues and comfortable with mainstreaming processes, with many having relevant training.

Rationale	For planning processes and mechanisms to be implemented effectively, planning staff need to have a grasp not only of climate change issues at large (scientific contexts, impacts, adaptation, mitigation, etc), but also of mainstreaming/integration processes and mechanisms. This includes familiarity with screening processes and climate risk assessments (CRAs) (e.g. the different ways of doing a CRA, how to prepare terms of reference for an external CRA, etc), as well as the identification, prioritisation, implementation and evaluation of risk reduction/ adaptation measures. These are areas of expertise in their own right, and the emerging nature of these areas means that significant capacity building specifically targeted at mainstreaming will be required for the effective integration of climate change into planning.
Country office role	The role of Country offices (COs) will depend on how the indicator is targeted (e.g. whether it is used to assess a specific programme or in a wider sectoral or national assessment). Several roles for CO staff can be envisaged: 1. Using the scorecard to assess a system (e.g. sector) targeted by one or more programmes. 2. Providing quality assurance for assessments performed by implementing partners. 3. Providing support for external consultants conducting screening of programmes or budget support.
Data source	Where assessments using planning indicators are carried out by external consultants, they will be based on consultations with CO staff and DFID development partners and national governments. Where assessments are carried out by COs themselves, they will be based on the judgment of key CO staff with responsibility for supporting the national processes and sectors in question, e.g. through sector budget support.
Data included and data aggregation	Where the indicator is used to report on a single programme, the data reported will be the score calculated across all criteria/questions that make up the indicator (up to a maximum of 10), applied to the system targeted by the programme. The scorecard should be completed at the beginning of the programme, during the programme (e.g. annually in the logframe), and at the end of the programme. Outcomes will be assessed on the basis of changes in the score over time, over the lifetime of the programme. To assess the outcomes of multiple programmes in a single country or sector, the data reported will be the score calculated across all 5 questions for the target system (e.g. country, sector). For such assessments, the scorecard should be completed on a regular basis. This might be done annually by the CO or its partners.
Most recent baseline	The baseline should reflect the situation prior to ICF funding being provided. Ideally baselines would be set at the start of a programme (for assesment of an individual programme) or during screening as part of a wider assessment (i.e. by country or sector). It is acceptable to produce retrospective baseline scores if able to use and produce documentation that supports these.

Good performance	The public should be looking to see countries receiving capacity building support (including GBS or SBS) improve their overall score over time (indicator scores calculated at the national level or for those sectors receiving support), and evidence that these improvements are due in whole or in part to DFID programmes.
Return format	1. Overall scores (0 to 10) broken down by scores for individual questions (0 to 2).
Data dis-aggregation	Data to be disaggregated and reported in the ICF results template: - Individual question scores i.e. for question 1 through 5 (score of 0, 1 or 2) Data to be disaggregated as part of workings and Quest number provided: Disaggregation of the following variables will not be collected as part of the ICF results template. Please include disaggregated data in your working documents and record the Quest number for these documents in the ICF results template. - Work to assess and moderate the quality of evidence used to support the scores for each of these questions will be carried out by CED during 2013. Please keep all evidence used in making your assessments and record the Quest number for these documents in the ICF results template. **Please note**: it is a mandatory requirement to list if each response is for an individual programme or multiple programmes in a single country or sector. There is a pull down box below the title of KPI 13 in the ICF results template where you can record this answer. This answer will be the same for KPI 14 so this only needs to be entered once.
Data availability	The indicator is based on the judgment of those assessing programmes/target systems (programme managers, other CO staff such as climate change advisers, implementing partners, or external consultants screening programmes or budget support). Guidance is provided on how to complete the scorecard, based on criteria for different answers for each question making up the indicator. Data are therefore based on one or more of the following: (i) the informed judgment of DFID CO staff, IP staff, or external consultants, (ii) knowledge of programmes and target systems (CO and IP staff), (iii) consultations with stakeholders (who will include CO and IP staff if the assessment is carried out externally). The availability of reliable data therefore will depend on the level of knowledge of CO and IP staff, and/or on the quality of consultations. However, there should be sufficient knowledge among CO and IP staff to ensure that the scorecard is completed realistically.
Time period/ lag	Where this indicator is applied in the context of individual programmes, it should be assessed annually in programme logframes, based on assessment of the target system(s). The indicator can also be applied to target systems (e.g. national systems, sectors, ministries, etc) on a regular (e.g. annual or biennial) basis, for example where these systems receive budget support.
Quality	Where this indicator is assessed by the CO, an independent

assurance measures	assessment might be performed during an SPR, by external experts. The answers to the 5 questions constituting the indicator should be justified by some explanation, e.g. describing the nature of the screening or mainstreaming processes, and giving examples of measures to address climate change. Work to assess and moderate the quality of evidence used to support the scores for each of these questions will be carried out by CED during 2013. So please keep all evidence used in making your assessments and record the Quest number for these documents in the ICF results template. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF results templates. Any comments can usually be added into the free text columns on the far right of each ICF results template. Further guidance should be available in the commissioning note.
Data issues	It is recognised that some element of subjective judgment is required, although the questions have been designed to be quite specific and transparent, with supporting guidance on how to answer the questions. In some cases data may be based on implementing partners' own assessments.
Additional comments	This indicator will be piloted under the *Tracking Adaptation and Measuring Development* (TAMD) framework between mid-2012 and late 2014. This indicator might be complemented by quantitative indicators that can be applied directly to the programme itself (see annex of DFID *Rapid Scoping of Climate Change Indicator Methodologies* report, June 2012).
Lead	Statistical advisor: Alex Feuchtwanger (DFID) a-feuchtwanger@dfid.gsx.gov.uk Subject matter lead: Juliet Field (DFID) j-field@dfid.gov.uk

<table>
<tr><td>Short title</td><td>ICF KPI 15: Extent to which ICF intervention is likely to have a transformational impact</td></tr>
<tr><td>Type of indicator</td><td>Scorecard</td></tr>
<tr><td>Key reporting requirements</td><td>Below is a list of key reporting requirements to keep in mind when making your returns. Further details are available in the text below:

<table>
<tr><th>Requirement</th><th>Summary</th></tr>
<tr><td>Is this a DRF indicator?</td><td>No</td></tr>
<tr><td>Available for reporting?</td><td>Yes</td></tr>
<tr><td>Methodology changes?</td><td>No</td></tr>
<tr><td>Units</td><td>Box marking i.e. 0, 1, 2, 3 or 4</td></tr>
<tr><td>Attribution</td><td>NA</td></tr>
<tr><td>Disaggregation to be reported in results templates</td><td>NA</td></tr>
</table>
</td></tr>
<tr><td>Technical Definition / Methodological summary</td><td>Assessment of the extent to which ICF climate change activities are likely to have a transformational impact on developing countries

<u>Technical Definition</u>
Transformational change is complicated and multifaceted. At its core it is change which catalyses further changes, enabling either a shift from one state to another (e.g. from conventional to lower carbon or more climate-resilient patterns of development) or faster change (e.g. speeding progress on cutting the rate of deforestation). However, it entails a range of simultaneous transformations to political power, social relations, markets and technology.

Many of the transformations the ICF is seeking to bring about will only be evident with a lag. Though it will be necessary to monitor these longer-term changes, most are unlikely to materialise within the period of the ICF. <u>This indicator therefore tracks early signs of transformation, or the extent to which key ICF activities either are being, or have a good likelihood of being, transformational</u>. It does so by using proxies for drivers of transformation, to assess the extent to which ICF support can be linked, if not attributed, to likely transformational change.

These proxies (henceforth called the ‘criteria’, as set out in the ‘Formula/data calculation’ section) are based on a Theory of Change for transformation (set out in the ‘Rationale’ section).

<u>Summary of methodology</u>
This is a mainly qualitative process indicator. <u>The expectation is that it will normally be assessed at the level of a significant ICF programme, or country / thematic portfolio, rather than for individual projects</u>.

This KPI will be assessed through two approaches:

a. <u>At programme or portfolio level</u>

Expected results
<u>A qualitative assessment of the type and nature of expected transformational change should be provided at the start of the programme (or portfolio of programmes)</u>. This assessment should be guided by the criteria included in the ‘formula / data calculation’ section. It is not necessary to provide a box marking for the expected result at this stage, the assumption being that this would be ‘4 – transformation judged very likely’, since all ICF programmes are designed to be transformational.</td></tr>
</table>

Actual results

ICF programme / portfolio managers should provide at each results reporting:

- An overall box marking giving an assessment of the likelihood that transformation linked to the ICF support will occur. Where there is more than one related ICF project in a country, regional or sector portfolio, the box marking should be presented at this more aggregate level, to reflect expected synergies (and reduce the risk of double-counting):

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

- A qualitative/narrative report against the relevant criteria of transformational change (see 'formula/data calculation' section below), with supporting evidence of change in those criteria, using programme (or portfolio)-specific sub-indicators. In many cases these will be drawn from the logframes of projects which comprise the portfolio. The box marking should flow from this review of the evidence.

This requires ICF programme managers to:

(i) define for their intervention what successful transformation would look like, and which of the criteria are relevant to report against (see 'Worked Example section' below);

(ii) identify programme-specific sub-indicators (e.g. drawing on logframes) related to each of the relevant criteria for transformational change, which can be used to monitor the transformational effects of the programme / portfolio. Some possible approaches are suggested in the 'formula/data calculation' section below;

(iii) provide a narrative assessment against each of the relevant criteria, using progress against the sub-indicators and any other supporting evidence;

(iv) assess transformational change against the KPI scorecard – it is suggested that each relevant criterion is scored, and builds to an overall assessment.

Consideration of contribution / attribution

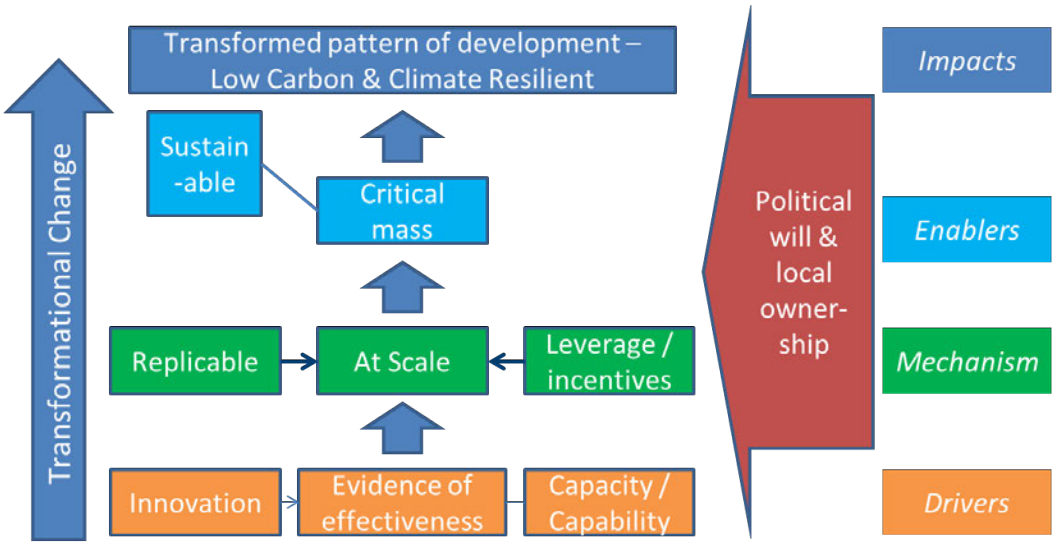
While it may be possible to *attribute* change in some of the TC criteria to ICF activities, it is expected that in many cases it will only be possible to track *contribution* to a wider effort.

As far as possible, reporting should be at the level of a significant programme or country (or similar) portfolio, to help ensure that the links between different activities are understood, and an assessment made of the likelihood that a critical mass of support for change is emerging.

The indicator seeks to track the transformational impact of HMG climate change "activities". Though the bulk of these will involve bilateral funding through the ICF, it will be important to recognise the role of wider influencing and policy support provided by HMG staff in ICF countries. The contributions of others to the likely transformational change - notably national governments, but also other donors and organisations - should also be recorded as part of expected and actual results.

	The methodology acknowledges that some ICF activities may inadvertently have an adverse effect on transformational change (pilots might go wrong and undermine the case/support for change; interventions may build capacity in one area by denuding it in another, etc.). It will be important that the evidence presented is balanced and also reported on any such negative influences. To the extent possible the evidence provided should draw on third party assessments and, ideally, be triangulated (i.e. come from multiple sources, viewpoints and types of data), to minimise the risk of self-assessment bias. *b. At level of the overall ICF* The central ICF M&E team will: • produce a report which draws on the project/programme box markings and supporting evidence to show what proportion of projects and spend are expecting to contribute to transformational change, and how likely this is judged to be; highlighting which parts of the overall ICF portfolio appear to be most likely to foster transformational change. • formally evaluate on an on-going basis a sample of the projects or programmes which expected at the time of approval to be associated with transformational change. This will be undertaken as part of the ICF fund level evaluation, which will utilise programme level monitoring and evaluation data. This formal evaluation will have two objectives: to allow a more in-depth assessment of the factors associated with the likelihood of transformational change; and, to provide an independent check on the projects' and programmes' self-reporting, and so assess – and hopefully moderate – possible optimism bias in the qualitative self-reporting. It is not proposed that transformational change evidence be aggregated at the overall ICF level in the same way as other ICF KPIs. Although the results will be synthesised, this will be to identify patterns and trends as a means of assessing overall progress (and to tease out lessons), rather than to form a view on the ICF's expected future global transformational impact. In aggregating the box markings, all programmes will be weighted equally. This KPI therefore adopts a qualitative approach to monitoring (not measuring) likelihood of transformation, relative to expected change.
Rationale	Background to this indicator ICF resources for climate change are but a very small part of the financing required to help developing countries build resilience and shift to lower carbon patterns of development. The ICF will have greater impact if it can be 'transformational' by, for example, encouraging others to replicate activities, and facilitating institutional and policy change. A challenge for this indicator is to capture these different, often country-specific, dimensions of transformational change, while remaining sufficiently simple so as to be unambiguous. The indicator recognises that transformation is multi-dimensional and that it will not be able to capture everything that, in time, may contribute to transformational change. Rather, the objective is to capture enough evidence to form a reasonable qualitative picture of ICF effectiveness in this area. The indicator is based on a number of premises and: • uses proxies (criteria) to assess the extent to which ICF support is linked to changes which are pre-conditions for subsequent transformational change; • links these criteria to the likelihood of transformational change using a simple theory of change;

	• accepts that it is neither possible nor necessarily desirable to try to attribute transformation to all ICF activities in all cases. Theory of change This note proposes that the ICF is likely to be more transformational in developing countries if several of the following criteria prevail (and at least one criterion for each different level of the theory of change – see diagram below for details): • ***Political will and local ownership****: need for the change is agreed locally and the process is locally owned*. For widespread changes, notably changes to the patterns of development, this will require high level political buy-in and broader support from across society; • ***Capacity and capability can be increased****: countries and communities have the capacities and capabilities necessary to bring the change about*; • ***Innovation****: innovative technologies are piloted, with the potential to demonstrate new ways of doing things, which could lead to wider and sustained change;* • ***Evidence of effectiveness is shared****: approaches which have proved successful in one location are made widely available and lessons on their usefulness are credible and shared widely*; • ***Leverage / create incentives for others to act****: the costs of climate action are reduced to the point that acting on climate is a sensible decision for commercial firms and private individuals*. These cost reductions may need to be steep enough to overcome behavioural inertia; • ***Replicable:*** *good ideas piloted by the ICF are replicated by others in the same country and more widely*; • ***At scale****: interventions (such as national, sectoral or regional programmes) that have sufficient reach to achieve institutional and policy reform, or drive down costs of technology deployment;* • ***Sustainable****: change is likely to be sustained once ICF support ends*. Ultimately, many truly transformational changes will require a ***critical mass***, to overcome political, market and other sources of inertia. Many of the points above relate to achieving this critical mass and the more of the above an intervention can promote, the greater the likelihood that it will lead to transformational change. In time, it will be necessary to complement this process indicator with outcome and impact indicators which track the extent to which there has been national transformational change in public and private action on climate change. However, these changes are unlikely to materialise within the period of the ICF and it will only be possible in exceptional circumstances to attribute this wider change to HMG/ICF efforts. The Theory of Change for Transformational Change is represented simply in the diagram below. This groups the TC criteria at three different levels (drivers, mechanism and enablers).

	Theory of Change for Transformational Change: 
Country office / programme manager role	The locally-specific conditions for transformational change mean there is a key role for country offices in leading, or at least contributing to, reporting against this indicator. Specifically, reporting at programme level is the responsibility of the programme manager. If the assessment is to be made at portfolio level, this should be undertaken by the country (or other) portfolio manager, and agreed between individual project leads where necessary. This indicator will rely in part on evidence and data collected in support of other KPIs and project / programme indicators (e.g. financial flows catalysed). However, because transformational change will be measured as impacts beyond individual projects, there is a need to go beyond routine project monitoring to understand, contextualise and interpret this information.
Data sources	There will be multiple in-country sources for the self-assessment: • personal contacts, e.g. with government officials, other donors seeking to replicate ICF-supported activities and with private investors; • partner Government policy statements and budget to track changes in political will and capacity to act; • analysis of others' reports for example World Bank reports on government policy and on the business environment; • project monitoring reports may contain relevant information on capacity development, policy implementation etc. Independent evaluation at programme and fund level will be able both to cross-check these sources with other information and go into more detail to assess the evidence on e.g. whether or not the costs of acting on climate change are falling in a country and, if they are, the extent to which this is attributable to measures in that country of part of a wider regional or global trend.
Reporting organisation	ICF Secretariat.
Data included	Qualitative self-assessment: box marking and supporting evidence.
Formula/ Data calculation	This is primarily a qualitative indicator. It will be assessed against a number of criteria of the likelihood of transformational change, which are drawn from the ICF transformational Theory of Change set out above (and consistent with the criteria used in ICF bidding round guidance).

Though the table also suggests the sorts of evidence which could be used to assess each criterion, programme managers should treat these as a guide and think carefully about what sorts of evidence are most relevant to their particular programme and local circumstances. This is important given that the barriers to systemic change are often local or specific to particular sectors.

What follows is intended both as a possible source to draw on, and as examples to stimulate programme managers to come up with better and programme / portfolio specific, locally-relevant measures. The categories are not intended to be of equal importance, and may not all be relevant in every case. However, an absence of some (notably 'political will' and 'capability and capacity') are likely to be major constraints on transformational change. 'Replication', though clearly important, is likely to be a later stage indicator. In turn, 'sustainability' is likely to rely on changes to many of the other criteria to be a truly transformational change.

Ideally, the sources of evidence by which the criteria will be assessed would be set out in the logframe in the initial Business Case. If not, then they should be formulated at the time a baseline is set for the intervention's expected transformational change.

Criteria	Approach and examples of indicators to assess by:
Political will and local ownership Fostering political will to act on climate change	Partner government is acting on climate change, as evidenced by: • the tracking of influencing activities by HMG staff *[see note on evaluating influence by DFID evaluation dept]*; • the quality of any national climate change strategy or similar, including whether this has been costed and included in the national budget, whether any proposals it contains for regulatory changes are being or likely to be implemented, whether the Ministry of Finance and key line ministries are actively tracking indicators of national change (via nationally formulated KPIs or similar), etc.; • research provided through ICF activities informing debates on climate change in national parliament or similar; • stakeholder engagement events organised by national government on climate change issues • civil society efforts to foster informed debate on climate change [as measured by newspaper column inches, twitter tweets etc.] • other [defined by programme or project]
Capacity and capability increased ICF-supported activities enhance local capacity to act on climate change	Evidence from HMG ICF country offices and spending units of one or more of the following: • Number of Government Depts or agencies undertaking own analysis of climate action following HMG support; • number of sector and national plans under implementation that mitigate risks and ensure adaptation to climate change by poor people; • Institutions important for addressing the new challenges climate change will pose are supported by HMG either to evolve or emerge; • HMG support makes developing country negotiators more influential in international negotiations;

			• Relevant capacities developed in the private sector [e.g. creation of/ support for effective trade associations supporting low carbon firms, building the capacity of financial intermediaries better to understand/assess the risk-reward profile of new technologies or energy efficiency, etc.]; • Increase in number of peer reviewed climate change publications by UK-supported local research bodies; • other [defined by programme or project]
		Innovative HMG-supported activities are encouraging innovation and testing new approaches.	Could include: • Number of domestic low carbon technologies supported *[where evidence can be taken from the low carbon KPI of this name]* • Number of domestic adaptation technologies supported; • Number & potential scope of new policy approaches tested; • Number & potential scope of new business models being tested and adopted; • Number of new market mechanisms for achieving emissions reductions piloted
		Evidence of effectiveness Ideas and lessons shared widely.	• Number of activities (e.g. workshops, key publications) delivered to disseminate programme experience, with evidence of take-up • other [defined by programme or project]
		Leverage / create incentives for others to act HMG-supported activities are creating the incentives for others to act on climate change.	Could include: • Policy and regulatory reforms initiated through HMG-supported activities cut costs for private investors (e.g. where we've supported the removal of regulations that hindered investment (could be support to allow independent power providers to operate & sell to grid)); • Development and introduction of policies and regulations supported which provide positive incentives for new approaches (e.g. where we've supported the development and implementation of a FiT); • Evidence that public goods provision supported by UK ODA encourages investment by others (e.g. new investments behind strengthened flood defences, private investment decisions informed by publicly available UK-supported climate projections, etc.) • other [defined by programme or project]
		Replicable HMG-supported activities are being replicated by others.	• Number & value of UK-developed approaches being copied by others [tracked in initiating country or region?] • Value of co-financing attracted into UK-initiated interventions • Volume of public finance leveraged *[public finance leveraged indicator]**

			• Volume of private finance leveraged *[use private finance leveraged indicator]** • other [defined by programme or project] * These measures could equally fit under the 'leverage/ incentives for others to act' criterion. Which one the programme manager chooses to put them under will depend on what elements of the generic theory of change are most relevant to the portfolio in question
		At Scale	Ideally this will be a quantitative assessment of resources mobilised relative to the magnitude assessed as necessary to effect the desired change. It will be location and context-specific. Such measures may well draw on other criteria and could include: • Proportion of population at risk who resilience is judged to have been markedly improved [drawing on other relevant KPIs] • X% of infrastructure at risk built to higher standard [eg X% of roads constructed or up-graded to cope with a 1 in X years rain storm] • A particular renewable technology accounts for X% of market share • X% of potential farmers are able to access a particular improved seed variety, or Y% of farmers have been trained in new adaptive or lower carbon practices
		Sustainable Activities are likely to be sustained once HMG funding ends.	A view on the likely sustainability of ICF-funded activities could comprise a synthesis of the evidence presented on each of the indicators listed above (and should certainly draw on the other criteria). Where relevant other evidence should be included in this assessment [defined by programme or project].
Worked example	It is suggested that the format for this qualitative report be as follows: *Expected Results* <u>At the start of the programme</u>, define what successful transformation looks like for the programme / portfolio (including its Theory of Change) and the key stakeholders involved; which of the TC criteria are relevant to report against; and the programme /portfolio-specific sub-indicators (steps 1-5): 1. What interventions comprise the programme or country / thematic portfolio? *[This step should list and very briefly describe – at impact and outcome levels and noting £values – the projects or programmes comprising the portfolio. This may be wider than just ICF programmes and include other influencing activities.]* 2. What is the baseline that transformational change is being assessed from? *[This should not really require any extra analysis further to the Strategic Cases of the main interventions comprising the portfolio, but may need amending if new projects are added to the portfolio, which address new issues.]* 3. What is the theory of change that links the programme / portfolio activities and the expected transformational change?		

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[Though this step will clearly draw heavily on the theories of change of the main interventions that make up the portfolio, it may require additional work given it should sit above those interventions. But if done right, the project ToCs should be nested within this overall one.]
4. Who else is crucial for ensuring this transformational change?
[This step contextualises the UK support and allows a political economy analysis of the change to be summarised. Other stakeholders could be considered in terms of a) those whose engagement is a necessary pre-condition for change; b) those who have been (or need to be) engaged during implementation; c) those who are not essential but whose engagement presents opportunities which can / have been made use of. This may need amending as additional key players are identified during programme / portfolio implementation.]
5. What will successful transformational change look like; when is it expected to occur; and how will it be assessed?
[This step has two purposes: (i) to set out what eventual impact is expected and when (drawing on impact statements of the interventions comprising the portfolio); (ii) to set out the criteria and sub-indicators to be used to assess the likelihood of TC, drawing on relevant indicators and KPIs from project / programme logframes.]
Actual Results
<u>At each reporting round</u>, provide a narrative and scorecard assessment of progress towards transformation (steps 6-7):
6. Narrative assessment of likelihood that the programme / portfolio will lead to the intended transformational change.
[This should report against the definition, criteria and sub-indicators of expected transformational change set out in steps 1-5. The evidence and sub-indicators should be grouped under the categories set out in the ToC diagram presented earlier. It may be helpful to score each individual criterion, to build up to the overall assessment. All assessments need to be evidenced and carefully referenced.]
7. Overall assessment of likelihood that programme / portfolio is transformational.
<table>
<tr><td>0</td><td>Transformation judged unlikely</td></tr>
<tr><td>1</td><td>No evidence yet available - too soon to revise assessment in business case</td></tr>
<tr><td>2</td><td>Some early evidence suggests Transformation judged likely</td></tr>
<tr><td>3</td><td>Tentative evidence of change – transformation judged likely</td></tr>
<tr><td>4</td><td>Clear evidence of change - transformation judged very likely</td></tr>
</table>
[The score should be based on an assessment of evidence assembled against relevant criteria of transformational change. Where there is evidence against criteria at more than one level of the TC theory of change (see ‘Rationale’ section), it will be possible to justify a rating of greater certainty. It is important that the likelihood of an ICF activity’s potential negative impact on transformational change is also considered. If judged sufficiently large to offset any positive influences, this could justify the ‘transformation judged unlikely’ score. The quality/credibility of evidence should be taken into account when weighing up information from different, and possibly conflicting, sources.]
</td>
</tr>
<tr>
<td>Most recent baseline</td>
<td>The baseline should reflect the situation before the ICF project activities start. An assessment against the relevant criteria should ideally be included in the Business Case or, if not, one should be made at the start of the project. It is acceptable to produce retrospective baseline scores if there is documentation to support these.</td>
</tr>
</table>

Good performance	Where definitive, triangulated evidence is presented on more than one criterion, and against criteria at more than one level of the TC theory of change, it will be possible to justify a rating of greater certainty. Where there is credible evidence of change that is more directly attributable to ICF activities then this will also tend to strengthen the performance assessment. However, some of the impacts to be tracked will be in response to multiple stimuli; there will, therefore, be limits to the extent of change that any HMG-funded initiative could reasonably attribute to itself.
Return format	The self-assessment box marking (for each relevant criteria and an overall marking) with explanatory text presenting evidence of transformation against relevant criteria, both to justify the assessment and assess the reliability of the evidence.
Data dis-aggregation	Self-assessment box markings should be completed for each major stand-alone climate programme in a country/portfolio (i.e. for all projects comprising an adaptation or low carbon portfolio). Where all projects/programmes are considered as synergistic and contributing to a single form of transformation (i.e. where the intended transformational change is towards patterns of development which are simultaneously low carbon and climate resilient) then only one self-assessment should be completed. In either case, the explanatory text should present evidence on specific individual projects which have caused or contributed to the specific transformation(s).
Data availability	The self-assessment and qualitative reporting will rely on in-country HMG staff being well connected (with other donors and, ideally, private investors) and knowledgeable about how climate change policy is made in that country. This knowledge should routinely be held between HMG in-country climate advisers and FCO staff. This indicator will rely in part on evidence and data collected in support of other indicators in the logframe.
Time period/ lag	We can anticipate a lag between the start DFID-funded activities and evidence of transformation effects. This lag will differ by type of country and nature of the HMG activity. The qualitative criteria have been designed to capture changes which could be expected to start in the life of the ICF. Indeed, too short a lag may question the extent to which change can be attributed to HMG activities.
Quality assurance measures	Risks and Challenges (see also Data issues section below) Care will be needed to minimise the risk of undue subjectivity. Use of consistent criteria (though flexibility in the means of verifying these) and overall scoring is intended to help achieve this. The central ICF M&E team will review the KPI self-assessments received from country offices for comparability in the rankings, for example, to ensure consistency in the weight given to similar types of examples. Independent evaluation at programme and overall fund level will allow a more in-depth assessment of the factors associated with the likelihood of transformational change and related outcomes. It will also provide independent verification of project/programme self-reporting and help moderate possible optimism bias in the qualitative reporting. If reporting officers have any concerns about the quality of data or any points that they think CED should be made aware of, then please note this in the ICF (and

	DRF) results templates. Any comments can usually be added into the free text columns on the far right of each template. Further guidance should be available in the commissioning note.
Data issues	To minimise the risk of subjectivity in programmes' self-assessments, more weight should be given to examples of transformation where there are multiple sources of evidence to support the ranking and where the evidence for this is as far as possible factual rather than based on the opinions of a few people or on speculation.
Additional comments	The indicators of likely transformational change will draw on other indicators and KPIs, notably the public and private finance leveraged indicators. Though there may be cases where there are examples of progress towards transformational change, despite poor progress on these other indicators in an individual country, the reasons would need to be explained carefully. Care will also need to be taken not to attribute influence to HMG for the replication of activities which we in turn copied from other organisations.
Leads	Statistical advisor: Alex Feuchtwanger (DFID) a-feuchtwanger@dfid.gsx.gov.uk
Latest revision	July 2014

Climate Change Compass helps the UK Government monitor, evaluate and learn from UK International Climate Finance

CLIMATE CHANGE COMPASS
BETTER CLIMATE FINANCE IMPACTS

HM Government

Hectares of land that have received sustainable land management practices as a result of ICF

KPI 17 Methodology Note

June 2020

*Click on page numbers above to navigate directly to specific sections

About Climate Change Compass
The UK government has committed to provide at least £5.8 billion of International Climate Finance between 2016 and 2020 to help developing countries respond to the challenges and opportunities of climate change.

Visit **www.gov.uk/guidance/international-climate-finance** to learn more about UK International Climate Finance, its results and read case studies. Visit **www.climatechangecompass.org** to learn more about how Climate Change Compass is supporting the UK Government to monitor, evaluate, and learn from the UK International Climate Finance portfolio.

Acronyms

BAU	Business as Usual
EPL	End of Programme Lifetime
GHG	Greenhouse Gas
ha	Hectares
HMG	Her Majesty's Government
ICF	International Climate Finance
KPI	Key Performance Indicator
MPA	Marine Protected Areas
M&E	Monitoring and Evaluation
SDG	Sustainable Development Goal
SLM	Sustainable Land Management
TPB	Total Programme Benefits
UK	United Kingdom
UN	United Nations
WOCAT	World Overview of Conservation Approaches and Technologies

Hectares of land that have received sustainable land management practices as a result of ICF

Rationale

The purpose of Key Performance Indicator (KPI) 17 is to monitor the total area of land that has received sustainable land management (SLM) practices as a result of UK International Climate Finance (ICF) interventions. Land degradation is a global challenge that threatens the benefits people receive from natural resources, including contributions to their livelihoods, health and wellbeing, as well as other benefits provided by biodiversity and ecosystem services. The challenge is exacerbated by climate change and human activities, including changes in land use and land cover that are known to drive biodiversity loss.

SLM aims to support, maintain and/or enhance the functions and services provided by a healthy ecosystem, both now and into the future (see **Technical Definition**). This indicator, KPI 17, measures the area (hectares) of land receiving SLM practices as a result of UK ICF. As an output indicator, KPI 17 is used to report SLM practices which are both spatially explicit and directly delivered by an ICF programme.

This indicator does not capture the long-term benefits received from implementing SLM practices, nor the quality of implementation for SLM practices in terms of meeting sustainable standards. SLM practices are place-specific, meaning a practice that is determined to be the 'most' sustainable practice in one area may not be the 'most' sustainable in another area as a result of varying biophysical and socio-economic characteristics[1]. Thus, reporting the quality aspects of SLM practices cannot be aggregated at the portfolio level.

KPI 17 is related to KPI 8 (Hectares of deforestation and degradation avoided through ICF support), which monitors reduced deforestation and forest degradation at the outcome level. The implementation of a SLM practice may result in reduced deforestation and/or reduced forest degradation within an ICF programme's area of interest. While KPI 17 would not report the resulting change in forest cover, KPI 8 would report such change in forest cover at the outcome-level. Therefore, there is a potential for the same hectares being counted for both indicators when an ICF programme reports both the area that is receiving SLM practices (KPI 17) and the area of reduced deforestation and degradation (KPI 8). For further detail on the relationship between KPI 17 reporting and KPI 8 reporting, see the **Summary Table** and **Annex 3**.

Summary Table

Table 1: KPI 17 Summary Table

Units	Number of hectares (ha)
Disaggregation Summary	N/A
Headline data to be reported	Annual Increase and Cumulative Net Increase of hectares receiving SLM practices, including the SLM practice groups, Lead SLM practice group (optional), and SLM practice sub-groups (optional if applicable).
Latest Revision	June 2020
Timing issues	*When to report*: ICF programmes are required to report ICF results annually. Please bear in mind how much time is needed to collect data required to report ICF results and plan accordingly.

[1] UN (2017). Sustainable Land Management Contribution to Successful Land-based Climate Change Adaptation and Mitigation. Available at: https://www.unccd.int/publications/sustainable-land-management-contribution-successful-land-based-climate-change

	Reporting lags: In some cases, data required for producing results estimates will be available after the results were achieved – if because of this, results estimates are only available more than a year away from when results are delivered, this should be noted in the results return.
Links to KPI Portfolio	SLM practices may result in reduced deforestation and/or forest degradation, and so hectares receiving SLM practices may also be reported as hectares of reduced deforestation under KPI 8. There are three possible relationships between KPI 17 and KPI 8 reporting: • The SLM practice does not plant, retain, or restore trees within the programme's area of interest and does not affect forest cover elsewhere (KPI 17 only); • The SLM practice does plant, retain, or restore trees within the programme's area of interest and therefore affects forest cover (both KPI 17 and KPI 8); • The SLM practice does not plant, retain, or restore trees within the programme's area of interest but does affect forest cover elsewhere (KPI 8 only). For further detail on the links between KPI 17 and other KPIs for ICF monitoring, including a description of where KPI 17 is located in the wider ICF results levels (i.e. output, outcome and impact) see **Annex 3**.

Technical Definition

The ICF definition of SLM is aligned with the UN definition as: "the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions"[2].

SLM consists of practices which aim to protect and conserve land resources to prevent degradation or return degraded resources to a productive state in which they can continue to provide ecosystem services. SLM practices can be categorised into overarching SLM practice groups, which consist of similar activities that look to manage a common resource. All KPI 17 reporting must be assigned to at least one of the SLM practice groups shown in Figure 1. Further detail on the SLM practice groups, including the definition for each group, is presented in Table 2 located in **Annex 1**.

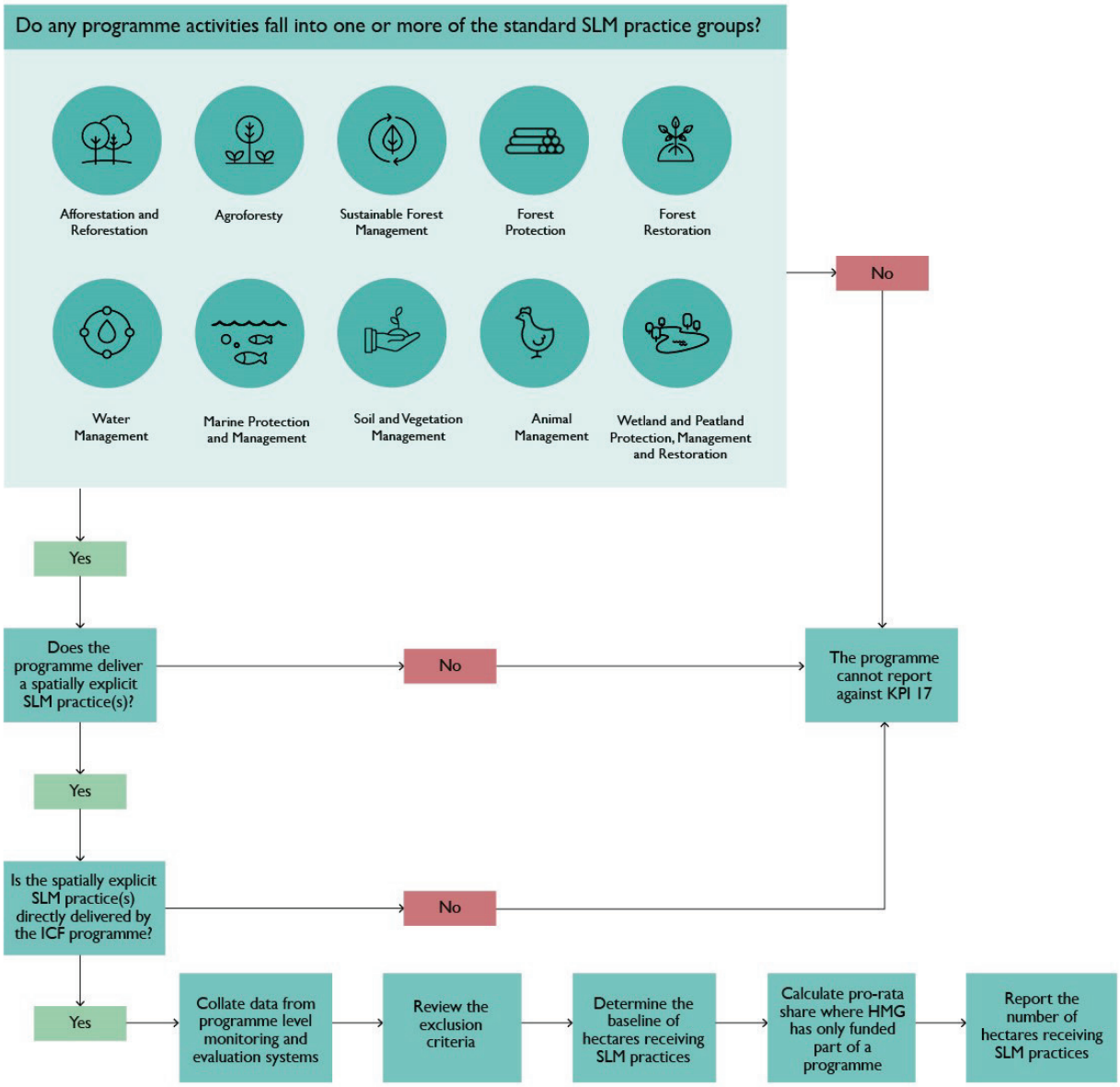
[2] UN 1992 Rio Earth Summit as outlined here: https://knowledge.unccd.int/topics/sustainable-land-management-slm

Figure 1: SLM Practice Groups

Methodological Summary

KPI 17 reports the number of hectares that are receiving SLM practices according to the steps and criteria presented in full in the **Methodology** section below. The main methodological steps are summarised in Figure 2.

Figure 2: ICF KPI 17 Methodological Steps



Methodology

1. **Determine whether any programme activities fall into one or more of the SLM practice groups identified in Annex 1 of this Methodology Note.**

Check that the programme has activities which fall into one or more of the SLM practice groups as shown in *Figure 1*. Further detail on the SLM practice groups is presented in **Annex 1**.

See example.

2. **Identify if the programme delivers a spatially explicit SLM practice(s).**

Identify if the programme intervention has a spatially explicit component (i.e. a component that can be measured in hectares). The term 'spatially explicit' means that a SLM practice is being, or has been, actively implemented on-the-ground, covering a number of hectares.

See example.

3. **Determine if the spatially explicit SLM practice(s) is directly delivered by the ICF programme.**

An output indicator is defined as a measurement of results which are delivered directly by an ICF programme (whether delivered through bilateral country programmes, or through contributions to multi-lateral organisations).

KPI 17 is an output indicator that measures the area (hectares) of land receiving SLM practices as a result of ICF intervention, and therefore the SLM practice must be directly delivered by the programme. If an ICF programme is delivering an activity that may, in turn, lead to the implementation of SLM practices over a number of hectares, then these hectares would constitute a result reported at the outcome-level and not be reported under KPI 17.

An example of a SLM practice directly delivered by the ICF would include an ICF programme planting trees across *X* number of hectares. The SLM practice (afforestation in this example) is directly delivered by the programme as it is implementing a physical intervention directly on the ground (see Worked Example 1).

The SLM practice can also be directly delivered by an ICF programme where the programme finances a third-party body (e.g. a fund) which implements a spatially explicit SLM practice. For example, if ICF resources are provided to support a regional fund that is directly delivering soil erosion control practices, then the hectares delivered by that fund can be included.

However, where there are more institutional or capacity building interventions as a result of an ICF programme, which then result in SLM, the SLM practice is not considered to be directly delivered by the ICF for KPI 17. For example, if a farmer receives training or technical assistance which could potentially lead to the incorporation of SLM practices on a farm of *X* number of hectares, then the resulting SLM practice has not been directly delivered by the programme and therefore should not be included. This example demonstrates a result at the outcome level, rather than at the output level, as other non-ICF factors may contribute to the likelihood of the farmer utilising, or only partially utilising the learning from the training / assistance provided (see Worked Example 3 in **Annex 2**).

See example.

4. **Collate data from programme level monitoring and evaluation (M&E) systems.**

The collated data must identify the total area that, at the time of reporting, has received a SLM practice. This is reported as an achieved result. Areas for which the ICF intend or plan to implement SLM practices should be reported as an expected result. Programmes are requested to provide an estimate of what they will achieve by the end of the programme's lifetime (EPL) and the total programme benefits

(TPB). These figures should be updated in the annual ICF results return if they have changed since last reporting.

See example.

5. **Review the exclusion criteria to determine if some or all of the hectares should be reported under KPI 17.**

When determining if *X* number of hectares should be included, programme managers must consider the spatial overlap of multiple SLM practices being delivered within the area of interest. The permanence of hectares being delivered over the programme lifetime should also be considered; however, it is not the responsibility of the ICF programme manager to actively monitor the permanence of hectares being delivered. Both criteria are discussed in turn.

Multiple SLM Practices

Areas of land receiving a SLM practice can be validly counted and reported once. Where there are multiple SLM practices occurring on the same area of land, only the overall number of hectares should be reported. No weights or multipliers are applied for hectares of land receiving more than one SLM practice.

See Worked Example 2 in **Annex 2**.

Permanence

There is no requirement for ICF programme managers to actively monitor the persistence of hectares between reporting years. However, if a programme becomes aware that any hectares of SLM practice have not persisted between reporting years, the ICF programme manager should advise the central ICF analyst team and adjust the reported number of hectares accordingly. Where hectares previously receiving SLM practice may have been lost, the ICF programme manager will provide commentary via the KPI 17 Reporting Template (**Annex 6**) to the central analyst team who will subsequently adjust or amend hectares reporting in previous years.

See example.

6. **Determine the baseline of hectares receiving SLM practices in the absence of the ICF programme.**

The ICF programme must establish a counterfactual baseline to determine whether the SLM practice groups being delivered by the programme would have been undertaken in the absence of ICF support. The counterfactual baseline is based on a qualitative assessment to determine the additionality of hectares receiving SLM practices. The counterfactual baseline should use available evidence to inform the qualitative judgement as to whether SLM practices being delivered by the ICF programme are already being practiced prior to ICF implementation. Areas of land already receiving the targeted SLM practices prior to the implementation of the ICF programme cannot be reported under KPI 17. For further guidance on establishing a counterfactual baseline, please see 'Most recent baseline' under **Data Management**.

See example.

7. **Calculate pro-rata share where HMG has only funded part of a programme (attribution).**

If HMG is the sole investor in a project or programme, it should assume all responsibility for any results where the results are assessed to be additional and where HMG has a causal role.

In many instances HMG may be acting alongside one or more other development partners or multilateral bodies that also provide funding or support for projects or programmes – and where each partner has

played a role towards the results. In these cases, HMG should only claim responsibility for the portion of results that can be attributed to its support.

If HMG is only funding part of a project/programme, reporters should calculate results as a pro-rata attributable share based on the value of all public co-financing towards the project.

In instances where ICF programmes leverage (public or private) finance that helps to deliver programme results, please contact the Departmental ICF advisors on how to address attribution of results delivered. See methodology notes for KPI 11 and KPI 12 for definitions (of public, private, and leveraged finance and co-finance).

If HMG is contributing to a fund

'First best' approach: use project/programme level attribution (as above)

In this approach, reporters calculate results attributable to the UK for each project/programme implemented by the fund using the project/programme level attribution approach, and then sum results across all projects/programmes in the fund to reach total UK attributable results. This approach allows for recognition of other co-finance contributions at the project/programme level. However, this approach may be complicated or not always possible in practice as it relies on: (i) full information about project/programme level inputs; and (ii) additional work to calculate results at the project/programme level.

'Second best' approach: use fund-level attribution

Reporters apply fund-level attribution (i.e. at point of UK investment) for reporting results. I.e. results should be shared across all donors that contribute to a fund. All results are attributable to the relevant fund (e.g. Climate Investment Funds, Climate Public Private Partnership Programme) regardless of whether these funds blend with other sources of finance in implementing projects at levels below the point of UK investment. This approach assumes that any further finance towards the project is counted as leveraged. Where this is known to not be the case, a more conservative approach to attribution may be appropriate, please contact the Departmental ICF advisors on further guidance. While this is not the preferred approach, as it does not recognise additional contributions at the project/programme level, it may be more practical to implement where full data on project/programme level inputs is not available.

Note: The distinction between attribution at the project/programme level and at the fund level (or at point of UK investment) is only an issue where the UK is investing in funds where there are multiple investment levels.

See Worked Example 2 in **Annex 2**.

8. **Report the number of hectares receiving SLM practices.**

KPI 17 requires ICF programmes to report hectares as an Annual Increase and Cumulative Net Increase.

Annual Increase: the additional hectares that have received SLM practices as a result of the ICF programme within the reporting year.

Cumulative Net Increase: the total number of hectares that have received SLM practices as a result of the ICF programme since the programme implementation.

The SLM practice group(s) being delivered as part of the ICF intervention must also be reported. There is no requirement to disaggregate the total number of hectares by SLM practice group. Where there are multiple SLM practices occurring as a result of the programme, either on the same area of land or separate areas of land, the SLM practice groups should be listed in the 'SLM Practice Groups' field of the Reporting Template provided in **Annex 6**. The ICF programme manager can provide further details on

which practices gained or lost hectares within the 'Reporting Commentary' field within the Reporting Template.

The lead SLM practice group can also be reported using the Reporting Template provided in **Annex 6**, only if the lead SLM practice group can be easily identified by referring to the ICF programme's strategic objectives and programme design documentation, for example by referring to the ICF programme's business case document. The lead SLM practice group is the main SLM practice group the ICF programme is delivering and should be aligned to the programme's strategic objectives. There is no requirement to report the lead SLM practice group and no requirement to disaggregate the total number of hectares by SLM practice group to determine the lead SLM practice group.

There is no requirement for programmes to report the SLM practice sub-group being implemented. However, where this is applicable, the ICF programme manager can report the sub-group to provide added value to the results. The sub-group can be reported under the 'SLM Practice Sub-group' field in the Reporting Template. (For example, 'Integrated Soil Fertility Management' is a sub-group identified under the SLM practice group 'Soil and Vegetation Management' as shown in **Annex 1**)

A reporting template is provided in **Annex 6** outlining how hectares should be reported.

See example.

Worked Example

Worked Example 1

A fictitious programme, currently reporting results in Year 3, aiming to provide humanitarian assistance to a local community by improving access to clean water, sanitation, nutrition, and health.

1. **Determine whether any programme activities fall into one or more of the SLM practice groups identified in Annex 1 of this Methodology Note.**

In order to avoid the impact of climate change on the local community, the programme focused on delivering environmental interventions. The environmental interventions included reforestation and soil erosion control, both of which are considered to fall under the SLM practice groups Afforestation and Reforestation and Soil and Vegetation Management, respectively.

2. **Identify if the programme delivers a spatially explicit SLM practice(s).**

One of the outputs for the programme was establishing 150 hectares (ha) of green corridor in the local community's region over the programme lifetime. The intended delivery of the green corridor within the programme's area of interest represents a spatially explicit practice, as it was a physical intervention implemented on-the-ground. The intended delivery of the green corridor was reflected in programme design documentation, including the programme's logical framework.

3. **Determine if the spatially explicit SLM practice(s) is directly delivered by the ICF programme.**

The newly established green corridor of 150 ha is a direct result of the ICF programme. Reforestation (planting new trees across a number of hectares) and soil erosion control practices (building terraces to prevent and control water erosion runoff velocities across a number of hectares) are considered to be directly delivered by the programme, as they were explicit output activities of the programme.

4. **Collate data from programme level M&E systems.**

In Year 1, the programme planted trees covering a total area of 100ha therefore both the annual increase and cumulative net increase number of hectares receiving SLM practice was 100ha in the first year of reporting.

In Year 2, the programme installed terracing to control soil erosion across a new and separate area of 25ha. Thus, in Year 2 the annual increase of additional hectares receiving SLM practices was 25ha, and the cumulative net increase was 125ha.

In the current year of reporting (i.e. Year 3), terracing and contour strips were installed across an additional area of 75ha. Therefore, in Year 3, the annual increase of hectares receiving SLM practice was 75 ha, and the cumulative net increase is 200ha.

Number of Hectares receiving SLM Practices:

YEAR 1	YEAR 2	YEAR 3
Annual Increase: 100ha	Annual Increase: 25ha	Annual Increase: 75ha
Cumulative Net Increase: 100ha	Cumulative Net Increase: 125ha	Cumulative Net Increase: 200ha

5. Review the exclusion criteria to determine if some or all of the hectares should be reported under KPI 17.

There were zero (0) hectares of reforestation delivered in Year 3. Therefore, the ICF programme manager determines that there was no spatial overlap between hectares of reforestation and the hectares of soil erosion delivered in Year 3. Given that there was no overlap in the implementation of the SLM practices, the total number of hectares gained can be counted.

Since the previous reporting year, that is Year 2, the ICF programme manager discovers that there were fifty (50) hectares of reforestation lost as a result of urban sprawl. The ICF programme manager reports the loss to the central ICF analyst team, who subsequently revise the results from the previous year.

6. Determine the baseline of hectares receiving SLM practices in the absence of the ICF programme.

The ICF programme design documentation has outlined the area of interest for implementing SLM practices. Informal discussions with stakeholders have been used to determine that no other programmes operating in the ICF area of interest are currently implementing reforestation or soil erosion control practices.

7. Calculate pro-rata share where HMG has only funded part of a programme (attribution).

All hectares resulted directly from the ICF programme and no other programme or intervention. ICF was fully funding the programme, and therefore, the total number of hectares can be attributed to ICF.

8. Report the number of hectares receiving SLM practices.

In the current year of reporting (i.e. Year 3), the programme manager identified that 50ha of the reforestation from Year 1 was lost to urban sprawl. As outlined in Step 5 above, the ICF programme manager informed the central ICF analysts via the reporting commentary field in the Reporting Template that Year 1 results required revision.

Total Number of Hectares

YEAR 1	YEAR 2	YEAR 3
Annual Increase: ~~100ha~~ 50ha	Annual Increase: 25ha	Annual Increase: 75ha
(Adjusted) Cumulative Net Increase: ~~100ha~~ 50ha	(Adjusted) Cumulative Net Increase: 75ha	(Adjusted) Cumulative Net Increase: 150ha

Please note that the above tables and text for Steps 4 and 8 of this worked example show the progression of hectares since ICF programme implementation to illustrate how the data should be reported against Annual Increase and Cumulative Net Increase for Year 3. The SLM practice groups have also been referred in the text for illustrative purposes, but there is no requirement to disaggregate the number of hectares by SLM practice group. The data needs to be reported in the KPI 17 Reporting

Template format (see **Annex 6**), as shown below. Data from the current reporting year (i.e. Year 3) was used to populate the template.

The programme manager identified from the programme's strategic objectives that Soil and Vegetation Management was the lead SLM practice group and populated the Reporting Template accordingly.

KPI 17 Reporting Template Format

Annual increase of hectares receiving SLM practice as a result of the programme	75ha
Cumulative net increase of hectares receiving SLM practice as a result of the programme	150ha
SLM Practice Group(s)	Soil and Vegetation Management; Afforestation and Reforestation
Lead SLM Practice Group (optional)	Soil and Vegetation Management
SLM Practice Sub-group(s) (if applicable)	Soil Erosion Control (sub-group for Soil and Vegetation Management)

Reporting Commentary	In Year 1, the programme planted trees covering a total area of 100ha therefore both the annual increase and cumulative net increase was 100ha. In Year 2, the programme installed terracing to control soil erosion across a new area of 25ha. Thus, in Year 2 the annual increase of additional hectares receiving SLM practices was 25ha, and the cumulative net increase was 125ha. Terracing and contour strips were installed across an additional area of 75ha. Therefore, in Year 3, the annual increase of hectares receiving SLM practice was 75 ha and the cumulative net increase was 200ha. It was identified that 50ha of reforestation reported in Year 1 has been lost to urban sprawl. Central ICF analysts to amend the 100ha reported in year 1 to 50ha. Considering the loss of hectares, the cumulative net increase for Year 2 has been adjusted to 75ha and the cumulative net increase for Year 3 has been adjusted to 150ha.
Quality Assurance	ICF programme staff have directly observed installation for a limited number of hectares of terracing for Year 3. ICF programme staff have confirmed the installation of the remaining (majority) of hectares with local extension officers. Records kept by the local extension officers are regularly updated and the estimated number of hectares is considered to be accurate.

Data Management

Data sources

Data collated as part of the ICF programme's M&E may originate from a variety of sources, including but not limited to, empirical and open source datasets. Examples of open source datasets include Copernicus Global Land Services of the European Commission[3] and Global Surface Water Explorer[4], amongst others. Data should be referenced, as far as possible, spatially on a map.

Most recent baseline

The ICF programme must establish a counterfactual baseline to determine whether the SLM practice groups being delivered by the programme would be undertaken in the absence of ICF support. The counterfactual baseline is based on a qualitative judgement assessment to determine the additionality of hectares receiving SLM practices. Establishing the counterfactual baseline may be challenging and will likely involve identifying the ICF programme's area of interest (if not already identified through programme

[3] Available at: https://land.copernicus.eu/global/products/lc
[4] Available at: https://global-surface-water.appspot.com/

design documentation), reviewing available documentation for programmes operating within the ICF area of interest, and undertaking discussions with involved parties and stakeholders to determine if the ICF programme's SLM practices are already occurring. The baseline should consider those specific SLM practices that will be delivered by the ICF programme. Areas of land currently receiving the proposed SLM practices prior to the implementation of the ICF programme cannot be reported under KPI 17, unless there is evidence indicating that these practices would cease in the absence of ICF support.

The ICF programme must provide a qualitative description of the KPI 17 geographical area-of-interest to assist fund and programme managers in identifying potential overlap with other ICF programmes or programmes being implemented by other organisations. The KPI 17 Reporting Template, provided in **Annex 6**, includes a field for providing the ICF programme's area of interest.

If the ICF programme is unable to estimate what the counterfactual is, it is suggested to use an 'adjustment factor', which should be high (e.g. 95%) if the programme is confident that results are additional, and the data quality is good. A lower 'adjustment factor' (e.g. 50%) should be used if the programme has a lot of uncertainty and there are other partners in the area undertaking similar activities. This 'adjustment factor' should be applied after all other steps in the calculation process are completed. For further advice on applying an 'adjustment factor' approach, please discuss with Departmental ICF advisers.

Data issues, risks and challenges

Doubling-counting could occur where different donors are claiming the same hectares. It could also occur between ICF programmes and/or within an ICF programme. Where ICF are acting alongside one or more other development partners or multilateral bodies, the formal process for calculating attribution must be applied, as outlined in Step 7 of the **Methodology**.

It is also important to check that two (or more) different ICF programmes are not claiming to have impacted the same hectares via SLM practices. If in doubt about this, programme teams should let ICF analysts know during the results commission. Where there is geographic overlap between multiple SLM practices, hectares can only be validly reported and counted once. Please see Step 5 of the **Methodology** for more information.

For forest programmes, the high cost of monitoring can pose a constraint on data collection. Satellites and remote sensing technologies are not always available, and forest surveying is highly labour intensive. As a result, detailed data may be unavailable for programmes covering large or hard-to-access areas.

Quality assurance

All results estimates must be quality assured at each stage data is received or manipulated before they are submitted during the annual ICF results return. For example, if data is provided by partners, this data should be interrogated by the ICF programme team for accuracy. When converting any provided data into KPI results data, quality assurance should be undertaken by someone suitable and not directly involved in the reporting programme. Suitable persons vary by department; this could be an analyst, a results/statistics/climate and environment adviser/economist. A description of the quality assurance process should be provided in the corresponding field provided in the KPI 17 Reporting Template (see **Annex 6**). Central ICF analysts will quality assure results that are submitted, and this may lead to follow up requests during this stage.

Any concerns about data quality or other concerns should be raised with your departmental ICF analysts and recorded in documentation related to your results return.

Data Disaggregation

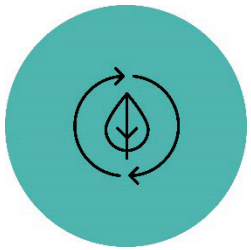
N/A

Annex 1: SLM practice groups

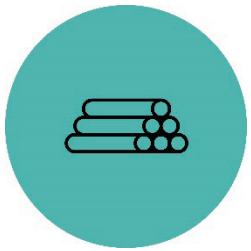
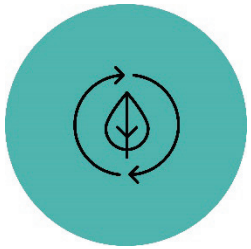
Further detail on the SLM Practice Groups, as shown in *Figure **1***, is presented in Table 2 below. There are 10 SLM Practice Groups of which three (Soil and Vegetation Management; Animal Management; and Wetland and Peatland Protection, Management and Restoration) contain sub-groups.

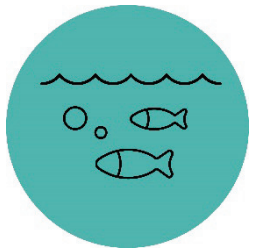
SLM is place specific and therefore the appropriateness of the technique being applied under the SLM groups will need to be considered to ensure the sustainability of the practice. For example, when reforesting an area, it will be important to consider the appropriateness of the type of species being implemented.

Table 2: SLM Practice Groups

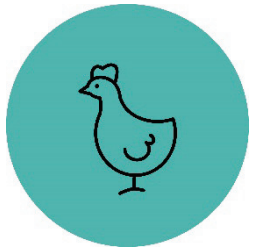
SLM Practice Group and Sub-Practice Group	Land Type	Definition
 **Afforestation and Reforestation**	Forest / woodlands Wetlands / peatlands	• Afforestation is delivered when trees are planted on areas of land which historically did not have forest cover. • Reforestation is the planting of trees on areas of land which previously contained forest but were converted to another land use and may have become degraded, including conversion to agriculture and poor agricultural practice, and timber abstraction amongst others. • Afforestation / reforestation practices have the potential to increase biomass accumulation (both above ground and below ground), soil organic carbon accumulation, and the related increase in soil biological activity, ecosystem biodiversity (including soil biodiversity) and derived ecosystem services, such as soil and water conservation, carbon sequestration potential, and often aesthetic and cultural values.
 **Agroforestry**	Mixed	• According to the World Agroforestry Centre, agroforestry is defined as land-use systems and practices where woody perennials are deliberately integrated with crops and/or animals within the same land management unit. • Depending on the combinations of trees, animals and crops, they are often classified into: Agri-silviculture (crops, including shrubs/vines alongside trees); silvo-pastoral (pasture/animals and trees); and agro-silvo-pastoral (crops and pasture/ animals and trees)[5]. • Agroforestry has the potential to reduce soil erosion and maintain soil fertility and productivity whilst also ensuring subsistence and/or providing market products. There is potential for it to maintain or increase soil organic matter, improve water retention as well as intercepting, absorbing and recycling nutrients in the soil which would otherwise be lost.
 **Sustainable Forest Management**	Forest / woodlands Wetlands / peatlands	• Sustainable forest management includes policies and technical standards for the responsible management of natural and planted forests. • Principles of forest management combine both forest productivity and forest conservation. • There is potential for sustainable forest management to reduce the vulnerability of forests and can therefore enhance carbon sequestration, biodiversity and water conservation. Sustainable forest management can also maintain forest productivity, providing socio-economic goods and services for forest dependent communities.

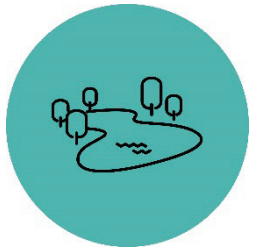
[5] Nair, P.K.R. (1985) Classification of agroforestry systems. Available at: https://link.springer.com/article/10.1007/BF00122638

SLM Practice Group and Sub-Practice Group	Land Type	Definition
 **Forest Protection**	Forest / woodlands Wetlands / peatlands	• Practices to reduce the conversion of forested areas to other land use, such as agriculture or the extraction of timber amongst others. • SLM practices aiming to reduce deforestation may have the greatest potential to mitigate climate change by reducing emissions of greenhouse gases (GHGs), but also by protecting soils, preserving biodiversity, providing food security and making forest-dependent communities more resilient.
 **Forest Restoration**	Forest / woodlands Wetlands / peatlands	• Forest restoration is the practice of bringing a degraded forest back to its natural or historical condition. • There are a variety of approaches which can be classified as: Restoration (bringing an ecosystem back to its original state as close as possible, including original flora and fauna and productivity); Rehabilitation (bringing the environmental services of an ecosystem back to its original state, particularly in relation to the provisioning services for goods or services but not all the original biodiversity); and Reclamation (where productivity or structure is regained but biodiversity is not).
 **Water Management**	Croplands	• Soil moisture management by improving soil's capacity to accept, retain, release and transmit water. • Improved water efficiency through reducing water requirements and evaporation. • Water storage and flood moderation to manage excessive or insufficient water supply. • Improved water quality via improving land and animal management practices. • Water management can result in increased productivity whilst also potentially reducing soil erosion. There is also a climate resilience aspect to water management, particularly in response to droughts, whilst also potentially mitigating contribution to climate change by decreasing soil carbon emissions. Economic benefits could also result from increased water efficiency and water savings.

SLM Practice Group and Sub-Practice Group		Land Type	Definition
 **Marine Protection and Management**		Coastal	• For this methodology, the marine environment is defined as the intertidal zone to cover the area between the extreme low and high tides which can then be classed as land. • Preventing and reducing the leakage of pollutants (including nitrates) from land into the marine environment. • Establishing Marine Protected Areas (MPA) as an effective way of managing the marine environment for the long-term conservation of nature alongside protecting ecosystem services and cultural values[6].
 **Soil and Vegetation Management**	Soil Erosion Control	Forest / woodlands Croplands	• Preventing or controlling wind or water erosion runoff velocities. • The approaches can be generally categorised into structural, vegetative, or combined/integrated technologies. • Soil erosion control involves the retention of soil which can lead to reduced carbon losses, promotes water recharge and increases productivity, but can also lead to increased soil organic content, carbon sequestration and enhanced biodiversity depending on the type of SLM technology implemented.
	Vegetation Management	Croplands	• Management of vegetation to improve its quality, quantity and diversity. • Management of invasive species to ensure that native diversity and overall function continues. • Vegetation management has the potential to improve soil structure, reduce soil erosion, and increase soil carbon.
	Integrated Soil Fertility Management	Croplands Grazing	• Combines different methods for managing nutrients and water, based on three principles of maximising organic fertiliser, minimising nutrient loss and using inorganic fertilisers sensibly based on needs and economic availability. • Integrated soil fertility management can lead to improvements in overall soil quality, reduce soil erosion, retain water and increase soil organic carbon. There is also potential for a reduction in nitrogen leakage into the environment and reduction in GHG emissions.
	Minimum Soil Disturbance	Croplands	• Reducing the level of soil manipulation and disturbance. • Minimum soil disturbance can increase the quality and fertility of soil as well as providing co-benefits such as controlling soil erosion and compaction and improving the availability and retention of water.

[6] Available at: https://www.iucn.org/content/when-a-marine-protected-area-really-a-marine-protected-area

SLM Practice Group and Sub-Practice Group	Land Type	Definition
	Agropastoralism	Mixed	• Diversified form of pastoralism that integrates crop production and livestock production and is a complex set of practices and knowledge which maintains a sustainable balance between pastures, livestock and people. • Agropastoralism has the potential to improve productivity of the landscape, prevent soil erosion and improve nutrient and water use efficiency. There is also potential for it to mitigate and increase resilience to climate change by reducing grazing pressures elsewhere.
	Integrated Pest and Diseases Control Fire, Pest and Diseases Control	Forest / woodlands Croplands Grazing	• Fire, pest and disease control are measures which prevent and manage the spread of fire, diseases and pathogens to avoid negative effects on soil, vegetation and ecosystems. • Integrated pest management includes a combination of measures being implemented simultaneously to control weeds and pathogens to avoid negative impacts on soil, vegetation and ecosystems. • Effectively controlling weeds and pathogens can protect crop yields whilst potentially having a synergistic effect on improving soil quality and preventing erosion, improving the soil organic pool, reducing GHG emissions and enhancing soil biodiversity. • Wildfires can result in significant damage to ecosystems. However, they can also be an essential part of forest structure and function maintenance, therefore the management of wildfires and sustainable use of controlled fires can reduce forest degradation.
 **Animal Management**	Grazing Pressure Management	Grazing	• Grazing pressure management determines the carrying capacity of the habitat or ecosystem and manages the timing and severity of grazing to ensure that the carrying capacity is not exceeded. Carrying capacity is the maximum livestock or wildlife population an ecosystem or habitat can efficiently support in terms of foraging and animal performance whilst maintaining the health and productivity of that particular area. • There is potential for the management of grazing pressures to prevent the erosion and deterioration of soil, and depending of the practice being implemented, it may also improve the carbon content of soil.
	Animal Waste Management	Grazing	• Animal Waste Management systems aim to recycle animal wastes as much as possible and are designed to effectively manage the handling, storage, and utilisation of waste. • Effectively managing animal waste increases the potential for improved soil fertility and productivity, reduced nutrient loss, improved water quality and can also mitigate climate change by preventing GHG emissions. The mobilisation of anti-biotics into water systems may also be reduced which may have positive effects on reducing anti-microbial resistance.

SLM Practice Group and Sub-Practice Group	Land Type	Definition
 **Wetland and Peatland Protection, Management, and Restoration**	Wetland Protection, Management, Restoration	Wetlands	• Wetland management typically involves manipulating water levels and vegetation in the wetland environment and/or providing an upland buffer[7]. • Restoration of wetland systems to their natural function through manipulation of physical, chemical or biological conditions.
	Peatland Protection, Management, Restoration	Peatlands	• Managing water levels to maintain water quality and ecological function and prevent GHG emissions. • Conserving the functional ecosystem units as the building blocks for habitat networks. • Preventing damage from development and conflicting land management. • Restoring peatlands to their natural function through manipulation of physical, chemical or biological conditions.

Source: Adapted from the definitions within the 'Sustainable Land Management contribution to successful land-based climate change adaptation and mitigation' (UN, 2017)[8]

[7] Available at: https://www.wocat.net/en/glossary/

[8] UN (2017). Sustainable Land Management Contribution to Successful Land-based Climate Change Adaptation and Mitigation. Available at: https://www.unccd.int/publications/sustainable-land-management-contribution-successful-land-based-climate-change

Annex 2: Further worked examples

Worked Example 2

Worked example 2 represents a fictitious programme that demonstrates how to report against KPI 17 when the ICF is co-financing a programme. It also demonstrates how to report against KPI 17 when multiple SLM practices are being implemented within an ICF programme, two of which have a geographic overlap.

A fictitious programme where the ICF programme aims to reduce soil erosion across 40,000 ha, plant mangroves across 13,000 ha and convert 2,000 ha of the marine environment to a marine protected area (MPA) over the programme's lifetime. The programme has 25% co-financing from the national government, ICF contribute the remaining 75%.

1. **Determine whether any programme activities fall into one or more of the SLM practice groups identified in Annex 1 of this Methodology Note.**

The activities that the ICF programme is implementing are reviewed by the ICF programme manager and compared against the SLM practice groups in Annex I. The ICF programme manager determines that the activities fall under three SLM practice groups: Soil and Vegetation Management, Afforestation and Reforestation, and Marine Protection and Management.

2. **Identify if the programme delivers a spatially explicit SLM practice(s).**

The ICF programme has outlined its aim to implement the SLM practices across a total of 55,000 hectares over the lifetime of the programme. The ICF programme manager determines that the delivery of the SLM practices over a discrete number of hectares is determined to constitute a spatially explicit result.

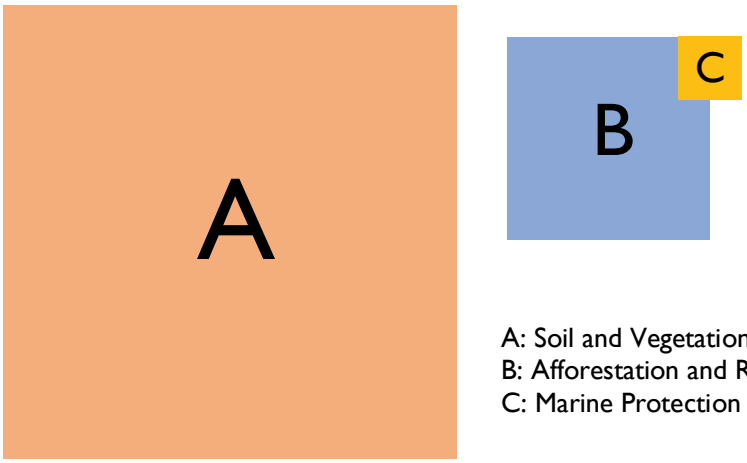
3. **Determine if the spatially explicit SLM practice(s) is directly delivered by the ICF programme.**

The ICF programme manager determines that the SLM practices are being directly delivered by the ICF programme, as the 55,000 ha are a direct result of the ICF programme intervention to be achieved over the programme's lifetime.

4. **Collate data from programme level M&E systems.**

After year 1 the programme has implemented SLM technologies to control soil erosion over 10,000 ha, planted mangroves across 2,000 ha and it also resulted in 200 ha being converted to MPA.

5. **Review the exclusion criteria to determine if some or all the hectares should be reported under KPI 17.**



A: Soil and Vegetation Management – 10,000ha
B: Afforestation and Reforestation– 2,000ha
C: Marine Protection and Management – 200ha

There are multiple SLM practices occurring as a result of the ICF programme. The Soil and Vegetation Management SLM practice is occurring on a separate area of land therefore the total number of hectares associated with this practice can be included within the reporting.

However, for the first year of reporting (i.e. Year 1 results) the Afforestation and Reforestation, and Marine Protection and Management SLM practice groups have an overlap of 100 ha of the same area of land which therefore should not be counted twice.

6. **Determine the baseline of hectares receiving SLM practices in the absence of the ICF programme.**

There are no other programmes operating in the area of interest for this ICF programme.

7. **Calculate pro-rata share where HMG has only funded part of a programme (attribution).**

As the national government is providing 25% of the finance towards the programme, only 75% of the number of hectares can be attributed to ICF. Thus, the total number of hectares is multiplied by 0.75 to yield the portion of results that can be attributed to UK support.

8. **Report the number of hectares receiving SLM practices.**

The programme manager identified from the programme's strategic objectives that Soil and Vegetation Management was the lead SLM practice group and populated the Reporting Template accordingly.

The annual increase of hectares receiving SLM practices as a result of the ICF programme in Year 1 is 9,075 ha. It is reported in the following format:

Annual increase of hectares receiving SLM practice as a result of the programme	9,075
Cumulative net increase of hectares receiving SLM practice as a result of the programme	9,075
SLM Practice Group(s)	Soil and Vegetation Management Afforestation and Reforestation Marine Protection and Management
Lead SLM Practice Group (optional)	Soil and Vegetation Management
SLM Practice Sub-group(s) (if applicable)	Soil Erosion Control (sub-group for Soil and Vegetation Management)

Reporting Commentary	The annual increase of hectares receiving SLM practices in Year 1 is 9,075. There was 10,000 ha reported for the Soil and Vegetation SLM practice group under the Soil Erosion control sub-group. There was 2,000 ha of mangroves reforested (Afforestation and Reforestation) and 200 ha was converted to MPA (Marine Protection and Management). However, the Afforestation and Reforestation and Martine Protection and Management practices overlapped the same area of land by 100 hectares. Therefore, 100 ha was deducted from the total annual increase reporting figure, resulting in 12,100 ha. As the ICF are providing 75% of the finance for this programme, the 12,100 ha was multiplied by 0.75 to result in an annual increase of 9,075 ha.
Quality Assurance	ICF programme staff have collated available field reports and corroborated the results with records kept by the national government's Ministry of Environment and Forestry. The number of hectares estimated is considered to be accurate.

Worked Example 3

Worked example 3 represents a fictitious programme that demonstrates when an ICF programme cannot report against KPI 17.

A fictitious programme where the ICF aims to revert degraded forests back to their natural state across an area of 50,000 ha by facilitating research, planning and analysis, as well as delivering capacity-building measures for the relevant stakeholders.

1. **Determine whether any programme activities fall into one or more of the SLM practice groups identified in Annex 1 of this Methodology Note.**

Activities associated with the programme are related to the Forest Restoration SLM Practice Group.

2. **Identify if the programme delivers a spatially explicit SLM practice(s).**

The programme is implementing research, analysis and tools to allow decision makers to be better informed and providing landowners with training to ensure better outcomes for forests. As this ICF programme is focussed on capacity building, it is not considered to be spatially explicit and therefore cannot report under KPI 17.

Annex 3: Comparability and synergies with other ICF KPIs

KPI 17 Reporting and KPI 8 Reporting

KPI 17 is related to KPI 8: Hectares of deforestation and degradation avoided through ICF support. KPI 8 monitors reduced deforestation and forest degradation at the outcome level. As briefly discussed in the **Rationale** and **Summary Table**, the implementation of a SLM practice may result in reduced deforestation and/or reduced forest degradation within the ICF programme's area of interest. Similarly, the implementation of SLM activities may result in reduced deforestation and degradation outside the ICF programme's area of interest. In both scenarios, KPI 8 would report the change in forest cover at the outcome level, as a result of the programme's output activities. If SLM practices are resulting in changes in deforestation and degradation both within and outside the ICF programme area of interest, then the number of KPI 17 hectares (limited to reporting within the ICF programme area) would only constitute a portion of the total area of reduced deforestation. Conversely, if SLM practices are being implemented that do not affect the forest cover, then these hectares would exclusively be reported under KPI 17 and not reported under KPI 8.

The potential relationships between KPI 17 reporting and KPI 8 reporting are presented with indicative examples in Table 3 below.

Table 3: Relationship between KPI 17 and KPI 8 reporting

Relationship between SLM practice and forest cover	**Examples of SLM practices affecting forest cover**	**Reporting hectares as a result of ICF intervention**
SLM practice does not plant / retain / restore trees within the programme's area of interest and does not affect forest cover elsewhere	• **Soil and Vegetation Management**: Application of organic fertilisers for increased soil fertility • **Water Management**: Cascading rock irrigation channel • **Animal Management:** Rotational grazing	Hectares are reported under KPI 17
SLM practice that does plant / retain / restore trees within the programme's area of interest and therefore affects forest cover	• **Afforestation / Reforestation**: Afforestation with species mix at different scales • **Forest Protection**: Establishment of protected forested area • **Forest Protection**: Reducing slash and burn agriculture	Hectares are reported under both KPI 17 and KPI 8
SLM practice does not plant / retain / restore trees within the programme's area of interest but does affect forest cover elsewhere	• Application of organic fertilisers leads to successful growth of alternative fuel source, resulting in reduced demand for fuelwood extraction in nearby forest • Establishment of a protected area reduces access to more remote non-protected areas, leading to a reduced rate of deforestation in nearby non-protected areas	Hectares are reported under KPI 8

KPI 17 Reporting and KPI 10 Reporting

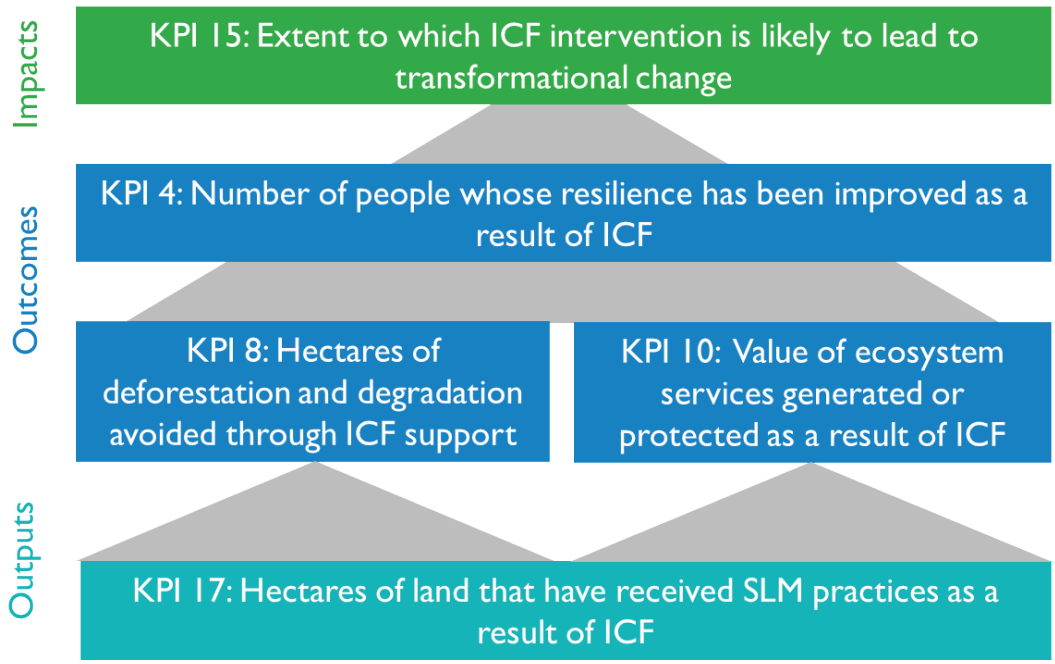
Reporting areas that are receiving SLM practices is linked to reporting against KPI 10: Value of Ecosystem Services generated and/or protected as a result of ICF support. The KPI 10 reporting methodology will directly benefit from increased reporting on areas receiving SLM practices, as it will inform data collection efforts and proxy data development.

KPI 17 does not report on the quality of implementation, however like KPI 8, the successful implementation of SLM practices will likely result in an increased value of ecosystem services at the outcome-level of reporting. KPI 10 reporting is not based on hectares, but instead reports in estimated monetary (and non-monetary) values and so there is no risk of double counting. In this way, KPI 17 reporting can be used to directly inform KPI 10 reporting but will not require reporting adjustments when both KPIs are being reported for a given ICF programme.

KPI 17 and the levels of ICF Results

KPI 17 provides an ability for the ICF portfolio to monitor spatially explicit results across a range of interventions that address agriculture, forestry and other land uses. Results reported against KPI 17 at the output level can then be used to better understand results being reported by outcome and impact KPIs further up the results chain. For example, KPI 17 reporting can be used to better inform results reported for increased resilience of social-ecological systems (KPI 4), which in turn can be used to better inform results reported for wider transformational change (KPI 15). An illustration of where KPI 17 is placed in the levels of ICF results is presented in Figure 3 below.

Figure 3: KPI 17 and the ICF Results Levels[9]



[9] Figure adapted from *ICF MEL Inception Report, May 2016*.

Annex 4: Comparability and synergies with other external indicators

KPI 17 directly relates to UN Sustainable Development Goals (SDGs) 6, 12, 14, and 15, as presented in Table 4 below.

Table 4: Links between KPI 17 and Sustainable Development Goals

SDG	SDG Target
SDG 6: Ensure availability and sustainable management of water and sanitation for all	6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally 6.4: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
SDG 12: Ensure sustainable consumption and production patterns	12.1 Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries 12.2 By 2030, achieve the sustainable management and efficient use of natural resources
SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 14. 2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans 14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics 14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests, combat	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

desertification, and halt and reverse land degradation and halt biodiversity loss	15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world 15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Source: UN SDG Goals[10]

Reporting on SLM practices can directly contribute to the identified targets for these SDGs, however there is only partial overlap with the associated SDG indicators. For example, while SLM practices can directly contribute to SDG Target 12.2, the associated indicators (12.2.1 and 12.2.2) track consumption per capita and per economic productivity. The area-based results reported for KPI 17 therefore do not reflect these metrics but could be used to support further calculations to deduce 'per capita' calculations.

A sample of SLM indicators used by other external agencies is presented in Table 5 below. This snapshot confirms that the KPI 17 indicator is consistent with approaches taken by other development partners and multi-lateral bodies.

Table 5: External Indicators

Organisation	**Indicator**
World Bank	Land area under sustainable landscape management practices (hectares)
Global Environment Facility	Area of landscapes under sustainable land management in production systems (hectares)
Green Climate Fund	• Terrestrial protected areas created or under improved management for conservation and sustainable use (hectares) • Marine protected areas created or under improved management for conservation and sustainable use (hectares) • Area of land restored (hectares) • Area of landscapes under improved practices (hectares; excluding protected areas)

Open source databases have been developed to capture the many different activities that comprise SLM practices. While these databases do not present indicators, they do offer further insight as to the types of activities that development partners and multi-lateral bodies consider falling within a SLM practice. Two examples of these open source databases include the Global Database on SLM of WOCAT (the World Overview of Conservation Approaches and Technologies)[11] and the U.N. Knowledge Hub on SLM Practices[12].

[10] Available at: https://sustainabledevelopment.un.org/?menu=1300
[11] Available at: https://qcat.wocat.net/en/wocat/
[12] Available at: https://knowledge.unccd.int/search?f%5B0%5D=type%3Abest_practice

Annex 5: Definitions of key methodological terms used across ICF KPIs

As different HMG departments may use the same terminology to refer to different concepts, this section sets out definitions for key terms used across Methodology Notes for ICF KPIs. The terms used in these notes refer to the concepts as defined below, rather than to alternative, department-specific usages of these terms.

Counterfactual: The situation one might expect to have prevailed at the point in time in which a programme is providing results, under different conditions. Commonly, this is used to refer to a 'business as usual' (BAU) counterfactual case that would have been observed if the ICF-supported intervention had not taken place.

Additionality: Impacts or results are additional if they are beyond the results that would have occurred in the absence of the ICF-supported intervention. That is, results are additional if they go beyond what would have been expected under a BAU counterfactual.

Causality: Causality refers to the assessment that one or more actors bear responsibility for additional results or impacts, because of funding provided though the ICF or actions taken under an ICF programme. Multiple development partners may be assessed to have played a causal role in delivering results.

Attribution: Attribution refers to allocating responsibility for impacts or results among all actors that have played a causal role in programmes that deliver additional results. Results are commonly attributed to causal actors based on their financial contributions to programmes (though there may be cases where greater nuance is needed, as with KPI 11 and KPI 12).

Annex 6: ICF KPI 17 Reporting Template

Programme / Name

Programme Summary	[insert one to two paragraphs describing the ICF programme]
HMG Department	[insert HMG department / office]
Implementation Period	[insert programme years]
Year of Reporting	[insert year of reporting for results]
Implementing Partners	[insert implementing partners]
Total Budget	[insert financial size]
Area of Interest	[insert qualitative description of programme boundaries]

Annual Increase of hectares receiving SLM practice as a result of the programme	[insert number of new hectares receiving SLM practice(s) within the reporting year]
Cumulative Net Increase of hectares receiving SLM practice as a result of the programme	[insert total number of hectares receiving SLM practice(s) since programme implementation]
SLM Practice Group(s)	[insert name of SLM practice group(s)]
Lead SLM Practice Group (optional)	[insert the lead SLM practice group of the programme, only if easily identifiable by referring to the programme's strategic objectives and programme design documentation]
SLM Practice Sub-group(s) (if applicable)	[insert name of SLM practice sub-group(s), optional only if applicable to the programme]

Reporting Commentary	[provide a brief narrative on the quantitative hectares calculation]
Quality Assurance	[provide details on the quality assurance process undertaken and a qualitative judgement on the strength of evidence]

Part 2 of this Schedule 1: The Tender

SCHEDULE 2 - PRICING

Part A

The Price payable to the Contractor by the Authority are set out within this Schedule 2. Save for any deductions under the Service Credit Regime, the Price payable to the Contractor is comprised of 4 (FOUR) elements:

1. Fixed Priced Element (subject to the Contract Price Adjustment Mechanism from Year 3 (THREE));

2. The actual cost incurred of Delivery Partner Reviews as defined by Section 3, Core Deliverable 1, Sub-Section E of Schedule 1 Specification of Requirement;

3. Schedule of Rates Element for delivery of the Supplementary Activity, as defined by Section 4 of Schedule 1 Specification of Requirement; and

4. The sum of the approved grant funding payable to Lead Delivery Partners.

The Contractor will present a consolidated quarterly invoice to the Authority. The Contractor must provide full backing data with the consolidated quarterly invoice to enable the Authority to verify the Contractors invoice.

Fixed Priced Element

The Authority will pay the Contractor the following sums in equal quarterly instalments in arrears:

Year	Price
Year 1 (ONE)	£[redacted]
Year 2 (TWO),	£[redacted]
Year 3 (THREE) and every year thereafter	Refer to the Contract Price Adjustment Mechanism

Delivery Partner Reviews

As defined by Section 3, Core Deliverable 1, Sub-Section E of Schedule 1 Specification of Requirement, the Authority will meet the actual costs incurred to undertake any Delivery Partner Reviews.

Following satisfactory completion of each Delivery Partner Review, the Authority will make payment at the following quarterly invoice.

Schedule of Rates Element

The Schedule of Rates will apply to additional activity carried out by the Contractor in delivery of the Supplementary Activity as defined by section 4 of Schedule 1 Specification of Requirement.

The rate below will be a ceiling but can vary between individuals. It is not expected that all individuals will charge at the maximum day rates stated.

Job Family Descriptions:

Job Family	Description
Programme leadership	This job family covers positions responsible for leading a whole programme. Responsibilities will include setting up strategic directions to the programme team and interacting with FCDO leads and any identified stakeholder (Governments/Industry Institutions/Ministries etc.). These positions are very often short term, and typically include positions such as Project Directors, Chair of Groups, CEOs, team leaders, etc.
Programme management	This job family covers middle-management positions responsible for the execution/delivery of programmes and managing their related teams. The roles require effective co-ordination of the programme's projects and management of their inter-dependencies including Risk/Financial and Contract Management control. It typically includes positions such as programme managers, finance managers, office managers to a certain extent and junior/graduate advisers at lower pay scales. These positions are long term roles.
Technical advisory/experts	are recognised subject matter experts who are appropriately qualified in their fields of knowledge and hired to provide detailed information and advice to the wider team, in the successful delivery of the programme. They can be short and/or long-term roles. This job family relates to specific technical skills related to individual programme themes, such as advisers, academics, web developers, report authors.
Support and Admin	This job family covers all positions relating to the programme support and administration. Program assistants provide administrative support in a variety of office settings (incl. "in country" and "back office"). General administrative duties for program assistants are often clerical in nature. They gather information, control documents and maintain records, schedule meetings, prepare necessary materials and compile reports. Duties can also involve computer work i.e. logging data, creating charts and updating websites. Program support duties include gathering information from program team members, reporting or investigating concerns and performing research. Program assistants also keep program plans up to date, allowing program managers to get a clear view of a programme current status. Program assistants also develop methods to coordinate and manage data and reports. These positions are mostly long term and include office support staff.

Role levels for Programme Leadership, Programme Management and Technical Advisory/Expert Advanced:

Level	Description

Expert	Internationally recognised expert in their field with exceptional knowledge of the subject area and extensive sectoral and / or regional expertise. Will have outstanding capabilities to conceptualise, design, and deliver complex interventions in a timely fashion. It is expected that an advanced individual will have a minimum of 15 years professional experience relevant to their field.
Standard	Exceptional knowledge of the subject area with extensive sectoral and / or regional expertise and proven ability to translate theory into practice. Will have proven capability to undertake team leader functions and provide quality assurance of the work of other team members. It is expected that a standard individual will have a minimum of 10 years professional experience relevant to their field.
Entry	Thorough theoretical knowledge of the subject area with proven ability to translate theory into practice. Will have proven capability to provide quality assurance of the work of other team members. Will have recognised, independently verified qualifications, i.e. through professional body membership. It is expected that an entry level individual will have a minimum of 5 years professional experience relevant to their field.

Role levels for Support and Admin:

Level	Description
Expert	Exceptional knowledge of the subject area with extensive sectoral and / or regional expertise and proven ability to translate theory into practice. Will have proven capability to undertake team leader functions and provide quality assurance of the work of other team members. It is expected that an advanced individual will have a minimum of 10 years professional experience relevant to their field.
Standard	Thorough theoretical knowledge of the subject area with proven ability to translate theory into practice. Will have proven capability to provide quality assurance of the work of other team members. Where relevant, will have recognised, independently verified qualifications, i.e. through professional body membership. It is expected that a standard level individual will have a minimum of 5 years professional experience relevant to their field.
Entry	Strong theoretical knowledge of the subject area with proven ability to translate theory into practice together with (where relevant) recognised, independently verified qualifications, i.e. through professional body membership. It is expected that an entry level individual will have a minimum of 2 years professional experience relevant to their field.

Maximum Day Rates (subject to Contract Price Adjustment) :

Job Family	Level	Maximum Day Rate exc. VAT
Programme Leadership	Expert	£[redacted]
	Standard	£[redacted]
	Entry	£[redacted]
Programme Management	Expert	£[redacted]
	Standard	£[redacted]
	Entry	£[redacted]
Technical Advisory/Expert	Expert	£[redacted]

	Standard	£ [redacted]
	Entry	£ [redacted]
Support and Administration	Expert	£ [redacted]
	Standard	£ [redacted]
	Entry	£ [redacted]

Contract Price Adjustment Mechanism

Upon the 2nd (SECOND) annual anniversary of the Contract and each annual anniversary thereafter the Price will increase by the **lessor** of:

a. 2% (TWO PERCENT); or
b. Consumer Price Index as defined by the Office for National Statistics.

Part B

Key Performance Indicators and Service Credit Regime

The Contractor's performance will be monitored against the following suite of KPIs and Service Credits applied in cases of the Contractor's performance been poor or requiring improvement:

KPI Ref	Principle	Measure Acceptable	Requiring Improvement	Poor
KPI-1	The Contractor presents reports required by the Authority on time.	Reports meet agreed deadline.	N/A	If any report misses the agreed deadline, save for circumstances where the Authority has given express written permission for a report to be submitted late.
KPI-2	The Contractor distributes Grant Funding in a timely manner.	Grant disbursal within 5 working days of receiving funds from the Authority.	Grant disbursal between 6 - 15 working days after receiving funds from the Authority.	Grant disbursal over 16 working days after receiving funds from the Authority.

KPI-3	The Contractor will promptly respond to and resolve the Authority's requests.	Requests marked as urgent; Acknowledgment of new urgent requests within 3 working hours. Agreed action or resolution plan within 2 working days. Routine requests: Acknowledgement of new requests within 2 working days. Agreed action or resolution plan within 5 working days.	Requests marked as urgent; Acknowledgment of new urgent requests within 6 working hours Agreed action or resolution plan within 3 working days. Routine requests: Acknowledgement of new requests within 4 working days. Agreed action or resolution plan within 7 working days	Requests marked as urgent; Acknowledgment of new urgent requests within 2 working days. Agreed action or resolution plan within 4 working days Routine requests: Acknowledgment of new requests within 5 working days. Agreed action or resolution plan within 10 working days.
KPI-4	Quarterly data provided to the Authority is accurate.	There are no instances of errors in the financial data and programme information provided to the Authority	1-2 examples of outdated, incorrect or insufficient information provided.	More than 3 examples of outdated or incorrect information provided.
KPI-5	The Contractor meets spend forecasts.	Less than 5% variance between actual spend and forecasts. Unless there is a Force Majeure event.	Between 5.1%-7% variance in forecasts. Unless there is a Force Majeure event.	More than 7.1% variance in forecasts. Unless there is a Force Majeure event.

KPI-6	The Contractor will work effectively with the Independent Evaluator & Lead Delivery Partners.	The Authority will administer an annual satisfaction survey with the Independent Evaluator and Lead Delivery Partners. The results of this survey will be discussed at the following quarterly review meeting.

Service Credit Regime (SCR)

Service Credits will only be applied to the fixed fee and any schedule of rates charged by the Contractor.

KPIs will be assessed on a quarterly basis with any Services Credit applied to that quarters invoice.

KPI Ref	Service Credit	
	Improvement Needed	Poor
KPI-1	2%	4%
KPI-2	2%	4%
KPI-3	2%	4%
KPI-4	2%	4%
KPI-5	2%	4%
KPI-6	N/A - Out of Scope	

SCHEDULE 3 - CHANGE CONTROL

Contract Change Note	
CCN Number	[x]
Contract Reference Number and Title	[x]
Variation Title	[x]
Number of Pages	[x]

WHEREAS the Contractor and the Authority entered into a Contract for the provision of a Fund Manager to support the Biodiverse Landscapes Fund dated 05/04/2022 (the "Original Contract") and now wish to amend the Original Contract

IT IS AGREED as follows

1. The Original Contract shall be amended as set out in this Change Control Notice:

Contract Change Details		
Change Requestor/Originator	[x]	
Summary of Change	[x]	
Reason for Change	[x]	
Revised Contract Value	Original contract value	£7,109,174.86 + VAT
	Previous contract change values	[£x]
	Contract Change Note [x] value	[£x]
	New revised contract value	[£x]
Revised Payment Schedule	[x]	
Revised Specification	[x]	
Revised Contract Period	[x]	
Change in Contract Manager	[x]	
Other Changes	[x]	

2. Save as amended all other terms of the Original Contract shall remain effective.

3. This CCN takes effect from the date on which both Parties communicate acceptance of its terms via Bravo.

SCHEDULE 4 - COMMERCIALLY SENSITIVE INFORMATION

1.1 Without prejudice to the Authority's general obligation of confidentiality, the Parties acknowledge that the Authority may have to disclose Information in or relating to the Contract following a Request for Information pursuant to clause E5 (Freedom of Information).

1.2 In this Schedule the Parties have sought to identify the Contractor's Confidential Information that is genuinely commercially sensitive and the disclosure of which would be contrary to the public interest.

1.3 Where possible the Parties have sought to identify when any relevant Information will cease to fall into the category of Information to which this Schedule applies.

1.4 Without prejudice to the Authority's obligation to disclose Information in accordance with the FOIA and the EIR, the Authority will, acting reasonably but in its sole discretion, seek to apply the commercial interests exemption set out in s.43 of the FOIA to the Information listed below.

Commercially Sensitive Information		
CONTRACTOR'S COMMERCIALLY SENSITIVE INFORMATION	DATE	DURATION OF CONFIDENTIALITY
The Contractor's Fees as set out within Schedule 2	5 November 2021	Until the Expiry or Termination of this Contract
The Contractor's Tender response as set out within Part 2 of Schedule 1	5 November 2021	Until the Expiry or Termination of this Contract

SCHEDULE 5 - PROCESSING, PERSONAL DATA AND DATA SUBJECTS

1. This Schedule shall be completed by the Authority, who may take account of the view of the Contractor, however the final decision as to the content of this Schedule shall be with the Authority at its absolute discretion.

2. The contact details of the Authority Data Protection Officer are:

data.protection@defra.gov.uk

3. The contact details of the Contractor Data Protection Officer are:

tom.w.riddell-webster@pwc.com

4. The Contractor shall comply with any further written instructions with respect to processing by the Authority.

5. Any such further instructions shall be incorporated into this Schedule.

Data Processing Descriptor	Narrative
Identity of the Controller and Processor	The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Controller and the Contractor is the Processor in accordance with Clause E2.1.
Subject matter of the processing	The Independent Evaluator will undertake field visits to engage with stakeholders and beneficiaries to provide opportunities for input and feedback to the evaluation. The Contractor and the Independent Evaluator will process this information. The Contractor may also undertake any field visits and may collect personal data of stakeholders and beneficiaries, as well as Lead Delivery Partners and Delivery Partners which could be processed by the Contractor.
Duration of the processing	The duration of the Contract
Nature and purposes of the processing	The nature of the processing includes collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, and use. Personal data will be anonymised prior to dissemination or otherwise making available e.g. on the Biodiverse Landscapes Fund learning platform/website. This platform/website will optimise lessons learnt and share best practice, that can be accessible to any interested party including members of the public. The Authority will approve all uploads to the BLF platform/website
Type of Personal Data	Name, gender, ethnicity, disability, religion, address/location, geolocation related data, organisations they belong to, opinions on interventions, political and thematic opinions, income, health, sexual orientation.

Categories of Data Subject	Stakeholders and beneficiaries impacted by programme interventions including government officials.
Plan for return and destruction of the data once the processing is complete UNLESS requirement under union or member state law to preserve that type of data	The Contractor will destroy all data at the end of the Contract and return to the Authority.

SCHEDULE 6 - NON DISCLOSURE AGREEMENT

THIS NON DISCLOSURE AGREEMENT is made the [insert day] day of [insert date] (the "Commencement Date"

BETWEEN:

PriceWaterhouseCoopers LLP of 1 Embankment Place, London, WC2N 6RH (registered in England and Wales under number OC303525) (the "Contractor");

and

[Insert name and address of the Staff member, professional advisor or consultant of the Contractor] (the "Disclosee").

(each a "Party" and together the "Parties").

WHEREAS:

(a) The Contractor has contracted with the Secretary of State for Environment, Food and Rural Affairs (the "Authority") to provide services to the Authority in an agreement dated 05/04/2022 (the "Contract").

(b) The Contract places an obligation of confidentiality on the Contractor. The Disclosee is an [insert employee, professional advisor or consultant] of the Contractor engaged in the provision of services to the Authority in support of or in connection with the services to be provided by the Contractor under the Contract.

(c) The Disclosee may therefore, have communicated to it, certain Confidential Information belonging to the Authority which is proprietary and must be held in confidence. Accordingly, the Contract requires the Contractor to ensure that the Disclosee enters into a non-disclosure agreement with the Contractor on the terms set out herein.

(d) Any Confidential Information disclosed by the Authority or the Contractor to the Disclosee, whether contained in original or copy documents, will at all times remain the property of the Authority together with all notes, memoranda and drawings that have been made as a result of access to such Confidential Information.

NOW IT IS AGREED as follows:

Definition and Interpretation

1. In this Agreement:

a) "Confidential Information" means: any information which has been designated as confidential by the Authority in writing or that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) whether commercial, financial, technical or otherwise including (without limitation) information belonging to or in respect of the Authority which relates to research, development, trade secrets, formulae, processes, designs, specifications, the Authority data, internal management, information technology and infrastructure and requirements, price lists and lists of, and information about, customers and employees, all materials and information belonging to third parties in

respect of which the Disclosee owes obligations of confidence; information the disclosure of which would, or would be likely to, prejudice the commercial interests of any person, intellectual property rights or know-how of the Authority and all personal data within the meaning of the General Data Protection Regulation (Regulation (EU) 2016/679), whether or not that information is marked or designated as confidential or proprietary; whether arising prior to, on or after the Commencement Date;

b) "Law" means any applicable Act of Parliament, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, exercise of the royal prerogative, enforceable community right within the meaning of Section 2 of the European Communities Act 1972, regulatory policy, guidance or industry code, judgment of a relevant court of law, or directives or requirements of any regulatory body of which the Contractor is bound to comply.

2. In construing this Agreement the general words introduced or followed by the word include(s) or including or in particular shall not be given a restrictive meaning because they are followed or preceded (as the case may be) by particular examples intended to fall within the meaning of the general words.

3. Unless the context requires otherwise, the singular shall include the plural and vice versa, and the masculine shall include the feminine and vice versa.

4. Reference to any legislative and statutory requirement or similar instrument shall be deemed to include reference to any subsequent amendment to them.

5. References to any person shall, as the context may require, be construed as a reference to any individual, firm, company, corporation, government department, agency, or any association or partnership (whether or not having a separate legal personality).

CONFIDENTIALITY

6. The Disclosee undertakes to: keep confidential all Confidential Information and safeguard it accordingly; and that any Confidential Information supplied will not be used by it for any purpose other than in connection with the Contractor's delivery of the services under the Contract without the prior written permission of the Authority.

7. The Disclosee will take all necessary precautions to ensure that the Confidential Information is held in confidence and will provide proper and secure storage for all information and any papers, drawings or other materials which relate to or are compiled from such information.

8. The Disclosee shall, with respect to any Confidential Information it receives directly from or on behalf of the Authority or from the Contractor, comply, with all instructions and/or guidelines produced and supplied by or on behalf of the Authority from time to time for the handling and storage of Confidential Information, generally or for specific items.

9. The Disclosee will not disclose any Confidential Information or any part thereof to any third party.

10. Where the Disclosee is an employee, breach of the obligations set out herein in this Agreement shall be a cause of disciplinary proceedings, and the Contractor shall institute

and enforce such disciplinary proceedings as against the Disclosee in relation to such breach.

11. Where the Disclosee is a professional advisor or consultant, breach of the obligation set out herein shall entitle the Contractor to terminate the contract of engagement with the Disclosee immediately, and the Contractor shall enforce such right of termination as against the Disclosee in relation to such breach.

12. All Confidential Information in tangible form received hereunder together with all copies thereof shall be destroyed or returned immediately to the Contractor or where so required by the Authority and notified to the Disclosee, to the Authority, upon request or upon completion of the task for the purposes of which such Confidential Information was released.

13. The Confidential Information will not be used by the Disclosee for any purpose or in any way other than under this Agreement.

14. The following circumstances shall not constitute a breach of the obligations of confidentiality contained in this Agreement:

14.1 Disclosure of Confidential Information by the Disclosee when required to do so by Law or pursuant to the rules or any order having the force of Law of any court, of competent jurisdiction;

14.2 Disclosure of Confidential Information by the Disclosee where and to the extent that the Confidential Information has, except as a result of breach of confidentiality, become publicly available or generally known to the public at the time of such disclosure;

14.3 Disclosure of Confidential Information by the Disclosee where and to the extent that the Confidential Information is already lawfully in the possession of a recipient or lawfully known to it prior to such disclosure;

14.4 Possession of Confidential Information by the Disclosee where it has been acquired from a third party who is not in breach of any obligation of confidence in providing that Confidential Information;

provided that, in no event shall information relating to the affairs of any identifiable person be disclosed or released from the obligations herein without the prior written consent of the Authority.

15. The Disclosee shall: notify the Contractor and the Authority promptly of the date and circumstances of the loss or unauthorised disclosure, if any, of the Confidential Information or any part of the Confidential Information and in addition, the action being taken to rectify that loss or unauthorised disclosure.

16. The obligations contained in this Agreement shall continue until notified in writing by the Authority or the Confidential Information becomes public knowledge (other than by breach of the terms of this Agreement).

17. No licence of any intellectual property rights (including but not limited to patent rights, copyrights, trademarks and rights in proprietary information and/or know-how and whether registrable or unregistrable) is granted hereby, beyond that necessary to enable

use of the Confidential Information for the purpose for which the Confidential Information was released.

18. Nothing in this Agreement shall be construed as compelling any of the Parties to disclose any Confidential Information or to enter into any further contractual relationship with any other party.

19. No representation or warranties are given regarding the accuracy, completeness or freedom from defects of the Confidential Information or with respect to infringement of any rights including intellectual property rights of others.

20. Without affecting any other rights or remedies that the other Parties may have, the Disclosee acknowledges and agrees that damages alone would not be an adequate remedy for any breach of any of the provisions of this Agreement.

GENERAL

21. No failure or delay by any Party to this Agreement in exercising any of its rights hereunder shall operate as a waiver of such rights, nor shall any single or partial exercise preclude any further exercise of such rights. Any waiver by a Party of any breach or non-compliance with any term of this Agreement shall not constitute a waiver of any subsequent breach of non-compliance with the same or any other term of this Agreement.

22. No Party may assign this Agreement or any of its rights and obligations hereunder without the prior written consent of the Authority.

23. Any notice under this Agreement shall be in writing and shall be delivered by post, fax or e-mail to the address of the Party in question set out at the beginning of this Agreement or such other address (or e-mail address or fax number) as the Parties may notify one another from time to time.

24. No term of this Agreement shall be enforceable, by virtue of the Contracts (Rights of Third Parties) Act 1999, by any person who is not a party to this Agreement other than the Authority. The Parties shall only with the prior written consent of the Authority be entitled to vary any of the provisions of this Agreement without notifying or seeking the consent of any third party and the rights conferred by section 2 of the Contracts (Rights of Third Parties) Act 1999 are excluded.

25. This Agreement shall be governed by and shall be interpreted in accordance with the laws of England.

26. The courts of England have exclusive jurisdiction to settle any disputes which may arise out of or in connection with this Agreement and accordingly that any proceedings, suit or action arising out of or in connection therewith shall be brought in such courts.

This Agreement has been entered into on the date first written above.

SIGNED by the authorised signatory for and on behalf of the Contractor:

SIGNED by the Disclosee:

SCHEDULE 7 - CONTRACTOR AND THIRD PARTY SOFTWARE

CONTRACTOR SOFTWARE

For the purposes of this Schedule 7, “Contractor Software” means software which is proprietary to the Contractor, including software which is or will be used by the Contractor for the purposes of providing the Services. The Contractor Software comprises the following items:

THIRD PARTY SOFTWARE

For the purposes of this Schedule 7, “Third Party Software” means software which is proprietary to any third party which is or will be used by the Contractor for the purposes of providing the Services including the software specified in this Schedule 7. The Third Party Software shall consist of the following items:

Third Party Software	Supplier	Purpose	No. of Licences	Restrictions	No. of copies	Other	To be deposited in escrow?

SCHEDULE 8 - SECURITY REQUIREMENTS, POLICY AND PLAN

INTERPRETATION AND DEFINITION

For the purposes of this Schedule 8, unless the context otherwise requires the following provisions shall have the meanings given to them below:

“Breach of Security” means the occurrence of unauthorised access to or use of the Premises, the Premises, the Services, the Contractor System, or any ICT or data (including Authority Data) used by the Authority or the Contractor in connection with the Contract.

“Contractor Equipment” means the hardware, computer and telecoms devices and equipment supplied by the Contractor or its Sub-Contractor (but not hired, leased or loaned from the Authority) for the provision of the Services;

“Contractor Software” means software which is proprietary to the Contractor, including software which is or will be used by the Contractor for the purposes of providing the Services and which is specified as such in Schedule 7.

“ICT” means Information Communications Technology and includes a diverse set of technological tools and resources used to communicate, and to create, disseminate, store and manage information, including computers, the Internet, broadcasting technologies (radio and television), and telephony.

“Protectively Marked” shall have the meaning as set out in the Security Policy Framework.

“Security Plan” means the Contractor’s security plan prepared pursuant to paragraph 3 an outline of which is set out in an Appendix to this Schedule 8.

“Software” means Specially Written Software, Contractor Software and Third Party Software.

“Specially Written Software” means any software created by the Contractor (or by a third party on behalf of the Contractor) specifically for the purposes of this Contract.

“Third Party Software” means software which is proprietary to any third party which is or will be used by the Contractor for the purposes of providing the Services including the software and which is specified as such in Schedule 7.

1. INTRODUCTION

This Schedule 8 covers:

1.1 principles of security for the Contractor System, derived from the Security Policy Framework, including without limitation principles of physical and information security;

1.2 wider aspects of security relating to the Services;

1.3 the creation of the Security Plan;

1.4 audit and testing of the Security Plan; and

1.5 breaches of security.

2. PRINCIPLES OF SECURITY

2.1 The Contractor acknowledges that the Authority places great emphasis on confidentiality, integrity and availability of information and consequently on the security of the Premises and the security for the Contractor System. The Contractor also acknowledges the confidentiality of Authority Data.

2.2 The Contractor shall be responsible for the security of the Contractor System and shall at all times provide a level of security which:

2.2.1 is in accordance with Good Industry Practice and Law;

2.2.2 complies with Security Policy Framework; and

2.2.3 meets any specific security threats to the Contractor System.

2.3 Without limiting paragraph 2.2, the Contractor shall at all times ensure that the level of security employed in the provision of the Services is appropriate to maintain the following at acceptable risk levels (to be defined by the Authority):

2.3.1 loss of integrity of Authority Data;

2.3.2 loss of confidentiality of Authority Data;

2.3.3 unauthorised access to, use of, or interference with Authority Data by any person or organisation;

2.3.4 unauthorised access to network elements, buildings, the Premises, and tools used by the Contractor in the provision of the Services;

2.3.5 use of the Contractor System or Services by any third party in order to gain unauthorised access to any computer resource or Authority Data; and

2.3.6 loss of availability of Authority Data due to any failure or compromise of the Services.

3. SECURITY PLAN

3.1 The Contractor shall develop, implement and maintain a Security Plan to apply during the Contract Period (and after the end of the term as applicable) which will be approved by the Authority, tested, periodically updated and audited in accordance with this Schedule 8.

3.2 A draft Security Plan provided by the Contractor as part of its bid is set out herein.

3.3 Prior to the Commencement Date the Contractor will deliver to the Authority for approval the final Security Plan which will be based on the draft Security Plan set out herein.

3.4 If the Security Plan is approved by the Authority it will be adopted immediately. If the Security Plan is not approved by the Authority the Contractor shall amend it within 10 Working Days of a notice of non-approval from the Authority and re-submit to the Authority for approval. The Parties will use all reasonable endeavors to ensure that the approval process takes as little time as possible and in any event no longer than 15 Working Days (or such other period as the Parties may agree in writing) from the date of its first submission to the Authority. If the Authority does not approve the Security Plan following its resubmission, the matter will be resolved in accordance with clause I2 (Dispute Resolution). No approval to be given by the Authority pursuant to this paragraph 3.4 may be unreasonably withheld or delayed. However any failure to approve the Security Plan on the grounds that it does not comply with the requirements set out in paragraphs 3.1 to 3.4 shall be deemed to be reasonable.

3.5 The Security Plan will set out the security measures to be implemented and maintained by the Contractor in relation to all aspects of the Services and all processes associated with the delivery of the Services and shall at all times comply with and specify security measures and procedures which are sufficient to ensure that the Services comply with:

3.5.1 the provisions of this Schedule 8;

3.5.2 the provisions of Schedule 1 relating to security;

3.5.3 the Information Assurance Standards;

3.5.4 the data protection compliance guidance produced by the Authority;

3.5.5 the minimum set of security measures and standards required where the system will be handling Protectively Marked or sensitive information, as determined by the Security Policy Framework;

3.5.6 any other extant national information security requirements and guidance, as provided by the Authority's IT security officers; and

3.5.7 appropriate ICT standards for technical countermeasures which are included in the Contractor System.

3.6 The references to Quality Standards, guidance and policies set out in this Schedule shall be deemed to be references to such items as developed and updated and to any successor to or replacement for such Quality Standards, guidance and policies, from time to time.

3.7 If there is any inconsistency in the provisions of the above standards, guidance and policies, the Contractor should notify the Authorised Representative of such inconsistency immediately upon becoming aware of the same, and the Authorised Representative shall, as soon as practicable, advise the Contractor which provision the Contractor shall be required to comply with.

3.8 The Security Plan will be structured in accordance with ISO/IEC27002 and ISO/IEC27001 or other equivalent policy or procedure, cross-referencing if necessary to other schedules of the Contract which cover specific areas included within that standard.

3.9 The Security Plan shall not reference any other documents which are not either in the possession of the Authority or otherwise specified in this Schedule 8.

4. AMENDMENT AND REVISION

4.1 The Security Plan will be fully reviewed and updated by the Contractor annually or from time to time to reflect:

4.1.1 emerging changes in Good Industry Practice;

4.1.2 any change or proposed change to the Contractor System, the Services and/or associated processes;

4.1.3 any new perceived or changed threats to the Contractor System;

4.1.4 changes to security policies introduced Government-wide or by the Authority; and/or

4.1.5 a reasonable request by the Authority.

4.2 The Contractor will provide the Authority with the results of such reviews as soon as reasonably practicable after their completion and amend the Security Plan at no additional cost to the Authority.

4.3 Any change or amendment which the Contractor proposes to make to the Security Plan (as a result of an Authority request or change to Schedule 1 or otherwise) shall be subject to a CCN and shall not be implemented until Approved.

5. AUDIT AND TESTING

5.1 The Contractor shall conduct tests of the processes and countermeasures contained in the Security Plan ("Security Tests") on an annual basis or as otherwise agreed by the Parties. The date, timing, content and conduct of such Security Tests shall be agreed in advance with the Authority.

5.2 The Authority shall be entitled to send a representative to witness the conduct of the Security Tests. The Contractor shall provide the Authority with the results of such tests (in an Approved form) as soon as practicable after completion of each Security Test.

5.3 Without prejudice to any other right of audit or access granted to the Authority pursuant to the Contract, the Authority shall be entitled at any time and without giving notice to the Contractor to carry out such tests (including penetration tests) as it may deem necessary in relation to the Security Plan and the Contractor's compliance with and implementation of the Security Plan. The Authority may notify the Contractor of the results of such tests after completion of each such test. Security Tests shall be designed and implemented so as to minimise the impact on the delivery of the Services.

5.4 Where any Security Test carried out pursuant to paragraphs 5.2 or 5.3 reveals any actual or potential security failure or weaknesses, the Contractor shall promptly notify the Authority of any changes to the Security Plan (and the implementation thereof) which the Contractor proposes to make in order to correct such failure or weakness. Subject to Approval in accordance with paragraph 4.3, the Contractor shall implement such changes to the Security Plan in accordance with the timetable agreed with the Authority or,

otherwise, as soon as reasonably possible. For the avoidance of doubt, where the change to the Security Plan to address a non-compliance with the Security Policy Framework or security requirements, the change to the Security Plan shall be at no additional cost to the Authority. For the purposes of this paragraph, a weakness means a vulnerability in security and a potential security failure means a possible breach of the Security Plan or security requirements.

6. BREACH OF SECURITY

6.1 Either Party shall notify the other immediately upon becoming aware of any Breach of Security including, but not limited to an actual, potential or attempted breach, or threat to, the Security Plan.

6.2 Upon becoming aware of any of the circumstances referred to in paragraph 6.1, the Contractor shall immediately take all reasonable steps necessary to:

6.2.1 remedy such breach or protect the Contractor System against any such potential or attempted breach or threat; and

6.2.2 prevent an equivalent breach in the future.

6.3 Such steps shall include any action or changes reasonably required by the Authority. If such action is taken in response to a breach that is determined by the Authority acting reasonably not to be covered by the obligations of the Contractor under the Contract, then the Contractor shall be entitled to refer the matter to the CCN procedure set out in Schedule 3.

6.4 The Contractor shall as soon as reasonably practicable provide to the Authority full details (using such reporting mechanism as may be specified by the Authority from time to time) of such actual, potential or attempted breach and of the steps taken in respect thereof.

APPENDIX 1- OUTLINE SECURITY PLAN

APPENDIX 2 - SECURITY POLICY: SECURITY POLICY FRAMEWORK

A copy of the Security Policy Framework may be found at:

https://www.gov.uk/government/publications/security-policy-framework