<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>
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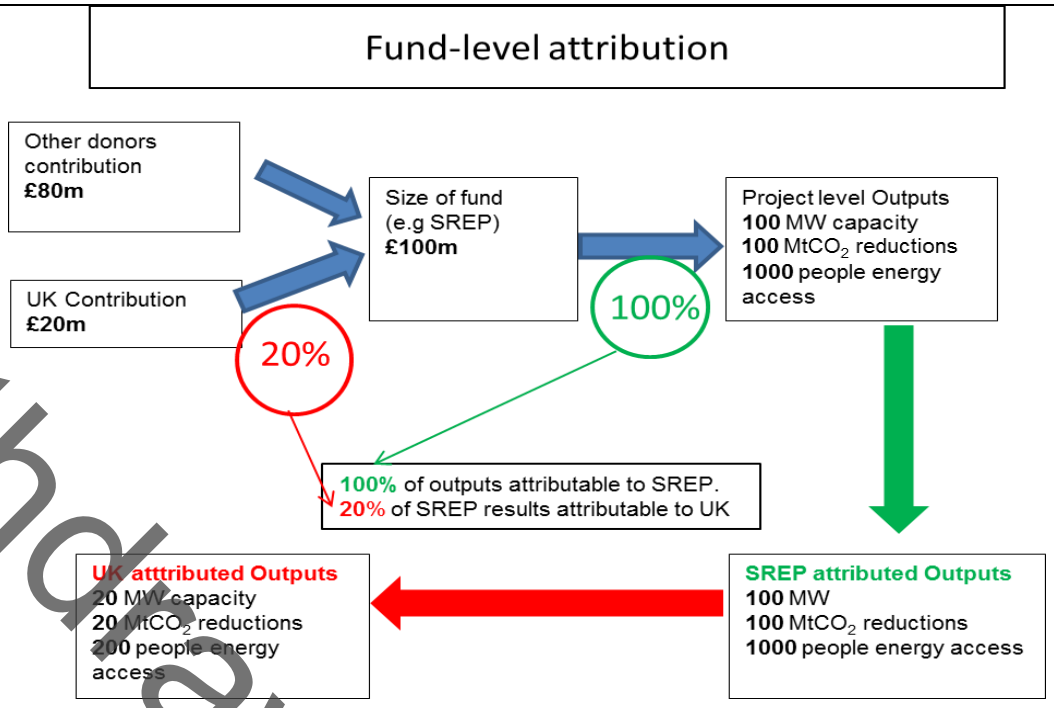
	and reviews. This will help to distinguish between high quality and low quality instances of technology.
Country office role	For each of their climate change programmes, country offices will need to assess the total installed capacity of clean energy and supply this information to the Climate and Environment 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