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| Indicator description         | <b>Number of people with improved access to clean energy as a result of DFID funding</b>   |
| Type of indicator             | Cumulative   |
| Technical Definition Summary  | <p><b><i>Number of people with improved access to clean energy as a result of DFID projects</i></b></p> <p>Clean energy access refers to:</p> <ul style="list-style-type: none"> <li>- New household connections to off-grid renewable energy sources. <i>(To note, on-grid access cannot be included in these figures because once on-grid, it is impossible to determine the energy source).</i></li> <li>- Households with more efficient cook stoves, solar lanterns or other clean technologies which generate energy.</li> </ul> <p>Clean energy is generated from both combustible and non-combustible renewables. Non-combustible renewables include geothermal, solar, wind, hydro, tide and wave energy. Combustible renewables and waste include biofuels (biogas, ethanol, biodiesel); biomass products (fuelwood, vegetal waste, pulp and paper waste, animal waste, bagasse), municipal waste (waste produced by the residential, commercial and public service sectors that are collected by the local authorities for disposal) and industrial waste; all for the production of power.</p> |
| Rationale                     | <p>Energy access is crucial to development; other services such as education, communication, refrigeration and better access to information are contingent on, or enhanced by, energy access. More efficient cook stoves etc also have health and time co-benefits. This is particularly the case for women/children who often suffer more from the negative impact of indoor air pollution and have to spend time collecting fuel wood. Clean energy should also partly displace fossil fuels resulting in lower carbon emissions.</p>  |
| Data calculation and guidance | <p>If data is collected at the household level, the country office will need to convert the number of households into the number of people. The country office will need to multiply by the average household size.</p> <p>Where HMG are only funding part of the projects, benefits should be calculated as a pro-rata share of funding.</p> <p>If several donors are active in the same region only those beneficiaries which are directly and closely linked to the ICF activities should be counted. If this is difficult to determine, all beneficiaries should be counted and the numbers proportioned according to the contribution by different</p>  |

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|                      | donors.  |
| Data sources         | <p>Use of project level Monitoring &amp; Evaluation, M&amp;E, (e.g. household surveys, project reporting) enables the tracking of clean energy access for International Climate Fund (ICF) <b>funded projects</b>.</p> <p>Data on household size should be determined from the most recent national census data or from a nationally representative household survey.</p>  |
| Reporting roles      | DFID Country Offices select the most relevant data and calculations and submit these to CED.   |
| Worked example       | DFID provides X number of households with solar lanterns. Household surveys through project M&E will identify the number of new households who have access to clean energy due to the ICF project compared to the initial baseline and forecast of those who would have bought solar lanterns anyway. Ideally the project level data will also be disaggregated by income level. X is then multiplied by the average household size as set out in the census or national household survey.   |
| Baseline data        | The baseline should reflect the situation prior to DFID/HMG 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.  |
| Return format        | Number of people with improved access to clean energy due to the ICF project, disaggregated by sex where possible  |
| Data dis-aggregation | <p>Where the data exists, number of poor people with improved access to energy due to the ICF project should be reported. This could be determined by numbers below a country level poverty line rather than the international \$1.25/day definition. This can be done using country level data or more subnational level data.</p> <p>Where possible, data should be disaggregated by income levels; gender (although this will not be possible if household indicators are used); urban/rural; and source of improved energy access (e.g. off-grid connection; more efficient cook stove; solar lantern; etc).</p> |
| Data availability    | Will vary by source. It is likely to be a few months if using routine project reporting data, longer if using household surveys.   |
| Time period/lag      | This will have to be worked through with country offices and multilateral partners, but a 6-9 month lag may be necessary.  |
| Quality              | It is recommended that, where possible, data collection and  |

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| assurance measures        | <p>quality assurance is undertaken by a third party that is not directly involved with implementing the project.</p> <p>Country offices will need to estimate country-level aggregation, where separate programmes may support the same people in different ways. Country offices will be in the best position to do this analysis on geographic overlap.</p> <p>If reporting officers have any concerns about the quality of data, then please note this in the DRF results template.</p>  |
| Interpretation of results | <p>An increase in this indicator will show that an increasing number of people have improved access to clean energy as a results of DFID support. Although this indicator should be reliable in terms of the number of people reached, it is not currently possible to disaggregate the degree of improvement in access experienced, or its longer term sustainability</p>  |
| Data issues               | <p><b>Poor people</b></p> <p>Ideally, the indicator ‘number of poor people with improved access to clean energy as a result of ICF projects’ should be reported. Where viable, this should be incorporated into the M&amp;E design of the project. However, this data may not be available for all projects.</p> <p>Where poverty data is available, numbers of poor people should be determined by a poverty metric relevant to that country (e.g. numbers below a country’s national poverty line, community poverty assessment, first quintile income levels) rather than necessarily the international \$1.25/day definition. This could be gathered using country level data or more sub-national level data. Whichever metric is used in the project should be stated in the return.</p> <p>Given all ICF projects happen in developing countries, this is used as a proxy that we are reaching the poor. There are limitations to this proxy as many countries in which the ICF works are unequal.</p> <p><b>Children</b></p> <p>The total number of individuals as calculated includes children. Children benefit from clean energy access at the household level as it enables them to e.g. do their homework. The other benefit from clean energy is in terms of health - indoor air pollution from cook stoves using dirty fuel is responsible for the deaths of 2 million women, girls and children under 5 (WHO/UNDP methodology, 2009). Women and children often suffer disproportionately from the effects of indoor air pollution and spend more time collecting fire wood.</p> |

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|  | <p><b>On-grid</b></p> <p>It is not possible to disaggregate grid electricity by source (clean vs. fossil). Furthermore, providing energy to the grid does not necessarily translate into access as new connections would need to be established simultaneously. This indicator therefore excludes on-grid energy. Any measurements of energy access are likely to be conservative and be a subset of results as improved access to the grid cannot be measured. Instead, the indicator to be examined should be 'installed capacity of clean energy' which is also a priority indicator for the ICF.</p>   |
| Data quality                             | <p>This outcome level indicator is relevant to measuring DFID's public commitment to help millions of poor people secure access to clean energy. The overall number of people with improved access to clean energy will measure how many people and who is benefitting. Results for this indicator are achieved through a mix of country office and multi-country programmes, each of which return results against this indicator based on information gathered as part of their routine project monitoring - largely through third party implementation partners. Although this indicator should be reliable in terms of the number of people reached, it is not currently possible to disaggregate the degree of improvement in access experienced, or its longer term sustainability. It is not possible to disaggregate grid electricity by source (i.e. clean vs. fossil), and so as a result this indicator excludes connections to on-grid energy. This indicator is consistent with methodologies used internationally, and ICF support to the World Bank Energy Sector Management Assistance Programme (ESMAP) and the Sustainable Energy for All (SE4ALL) Initiative is continuing to improve the indicator and data availability. There are no concerns in regards to cost and confidentiality.</p> |
| Additional comments                      | NA   |
| Variations from the standard methodology | NA   |