



Draft Terms of Reference for the en.lighten Global Taskforces

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Introduction

In 2009 the GEF Secretariat approved the UNEP *Global Market Transformation for Efficient Lighting Project*, known as the *en.lighten* initiative or *Efficient Lighting for Emerging and Developing Countries*. The GEF tasked UNEP to lead this initiative with the aim of becoming an umbrella effort to promote efficient lighting worldwide.

The main goal of the initiative is to transform the market to efficient lighting through the achievement of three inter-related objectives: (1) to promote high performance, energy efficient lighting technologies; (2) to phase out inefficient, incandescent lights; and (3) to substitute traditional fuel-based lighting with modern, efficient alternatives with consideration for mercury free alternatives.

The initiative will serve as a platform to build synergy among stakeholders, share knowledge and information, create policy and regulatory frameworks, address technical and quality issues, assist public and private entities for the establishment of efficient partnerships and support country programs.

A key element in the structure which has been set up to administer this project is a network of Centres of Excellence. The Centre of Excellence is composed of independent stand alone organisations capable of delivering selected technical and policy related competences in support of the initiative's goals and objectives. The organisations selected to participate in this network are required to:

- Efficiently and effectively participate and contribute in the day to day management of a Task Force (TF) with:
 - A specific agenda and objectives
 - Set deliverables and work plan
 - Pre-agreed timelines for delivery of objectives
- Be well networked in their field of expertise to the extent that they are capable of assembling other global experts to participate and deliver on objectives set by the Project Management Team (PMT)
 - Have access to independent experts in the area of competence indicated by the PMT
- If required, to supervise strategy, policies, knowledge management, best practice diffusion, quality and harmonization initiatives.

The TF's will be supported by a dedicated staff member from the *en.lighten* PMT. The *en.lighten* staff member will be responsible for the following tasks to enable the smooth running of the TF:

- Coordinating meetings (agreeing location or conf call details)
- Setting the agenda (in cooperation with the TF Chair and members)
- Minute taking and responsibility for follow up actions (personal and group)

- Provide a link with the Project Management Team to facilitate exchange of critical information between TF and the PMT.
- Development of targeted research and reports as mandated by the TF.

The TF members will be required to:

- Select a TF Chair and to confirm the permanent members of the Task Force at the kick off meeting.
- Quickly familiarise themselves with the TF discussion document and plot a course towards the achievement of the TF objectives.
- Select an appropriate modus operandi deciding where and how often face to face meetings or conference calls should be held.

The TF Chair may from time to time be required to report on the progress of the Task Force to the PMT.

The following TF's are expected to be set up:

1. Lighting Assessments, Market Data & Analysis
2. Product Quality, Testing and Enforcement
3. Policy, Regulation and Voluntary Initiatives
4. Standards, Labels and Technology Evolution
5. Consumer, Environmental Protection and Recycling
6. Off Grid Lighting

Please refer to sections below for details of the different TF's key goals and mandates.

1. Task Force on Country Lighting Assessments, Market Data and Analysis (CLA)

The rationale behind the en.lighten **Country Lighting Assessments** (CLA) is to provide an opportunity to demonstrate “low hanging fruits” i.e. energy saving appeal of efficient lighting in individual countries and globally. In addition the CLA will serve to generate commitment towards engaging in national or regional market transformation activities. The CLA will also serve to motivate countries into “signing in” to the en.lighten initiative in order to promote efficient lighting. The en.lighten initiative will facilitate support to signatory countries through technical cooperation or facilitation of support using other relevant initiatives, institutions and platforms.

The en.lighten CLA will review country lighting markets to identify key components, such as:

- Energy and CO2 footprint
- Technology mix of the installed base
- Review of the status quo regarding lighting related standards and other initiatives (such as efficient lighting programs)
- An estimation of the energy, CO2 and financial savings associated with a move to efficient lighting
- Provision of practical recommendations

It is foreseen that countries that will be invited to participate in a high level event in COP-16 (Mexico, December 2010). Interest generated through this event and further contacts with interested countries will serve to develop in depth assessments in selected countries. Such an approach may assist in leading to the phase out of ILs and the emergence of a global lighting approach in order to reduce GHG emissions.

The task force will formulate and implement a CLA strategy as follows:

- a. **Establishment of a Common CLA methodology** - It is important that findings from various countries are easily able to be compared and contrasted to highlight and perhaps provide an internal ranking to quickly indicate the most interesting opportunities for savings in lighting. The methodology outlined below is taken from the *International Protocol for Measures and Verification Project (MVP)*¹ guidelines and provides an example of the steps to be followed:
 - Gather relevant energy and operating (installed base technology mix) data from the base year and record it in a way that can be accessed in the future.

¹ MEASUREMENT, REPORTING AND VERIFICATION IN A POST-2012 CLIMATE AGREEMENT <http://www.pewclimate.org/docUploads/mrv-report.pdf> & <http://www.nrel.gov/docs/fy02osti/31505.pdf>

- Design the energy savings program including documentation of both the design intent and methods to be used for demonstrating achievement of the design intent.
- Prepare a Measurement and a Verification (M&V) Plan.
- Gather energy and operating data from the post-retrofit period, consistent with that of the base year and as defined in the M&V Plan.
- Compute and report savings in accordance with the M&V Plan.

b. ***Develop criteria to select pilot countries*** - Specific criteria will need to be developed for participating countries that will act as screening criteria to determine which countries will formally participate in the project.

As part of the market data and analysis tasks the task force should constantly monitor the global lighting market in order to identify approximate market share evolution by:

- On and off-grid split in terms of absolute lighting market share
- Split per technology type
- Energy consumption per lighting application
- Etc.

Expected outcomes of this TF may include the following:

- Regular market evolution reports in on and off-grid lighting to allow activities/results of the global project and effect of other efficient lighting projects to be tracked.
- Agreed and implemented methodology for country lighting assessments.
- Supervise the results of the country lighting assessments.
- Agree on criteria for the selection of pilot countries
- Supervise the development of in depth assessments for countries that sign in to en.lighten principles and goals.
- Others to be identified.

2. Task Force on Product Quality, Monitoring, Verification and Enforcement (PQ MVE)

Despite many efforts to improve compliance with standards and labels and various examples of better practice in many countries, non-compliance continues to be a major factor limiting the effectiveness of energy efficiency programs in achieving energy consumption, efficiency and related environmental and health goals.

Many international organizations and industries have long recognized this problem and recently warned that policy objectives will be undermined by energy measurement standards that fail to reflect actual energy use or provide a true end-use efficiency ranking of equipment. In fact indicative levels of non-compliance are approximately 25% for appliance programmes such as lighting.

The increasing focus on CFLs has significantly accelerated the global demand for the lamps. Worldwide CFL production has increased six-fold in the last decade, from 500 million lamps in 2000 to more than 3 billion lamps in 2008. This is expected to accelerate, as the phase out of incandescent lamps could boost demand of CFLs to as many as 10 billion units per year.

Countries in Asia particularly and other parts of the world face serious challenges when it comes to adoption of CFLs, including purchase cost, sub-standard quality, a lack of common standards for CFLs, and a lack of consumer awareness about CFL quality. In addition, although CFLs are being sold throughout the world, the lack of a common standard makes it difficult for data sharing across the region, or establishment of a regional testing program.

Since CFLs are being promoted as a direct replacement for incandescent lamps, CFLs that do not outperform incandescent lamps can result in serious consumer dissatisfaction with the product category as a whole. Thus, the terms “low-quality,” “lower-quality,” “sub-standard,” “poor,” or “shoddy” are now being used by experts, program managers, and regulators to describe the poor-performing CFLs that are being produced in large quantities and sold in many markets around the globe.²

Research has shown that considerable energy and greenhouse gas savings could be achieved through implementation of the following measures:

- The integration of **compliance and evaluation procedures** into the design of new policies and measures from the outset;
- Harmonisation of appropriate legal and institutional infrastructures for ensuring compliance with energy efficiency requirements;
- Transparent and fair procedures for assessing compliance, including specification of the methods, frequency and scope of monitoring activities,;

² Testing for Quality – Benchmarking Energy Saving Lamps in Asia

- Regular and public reporting of monitoring activities, including instances of non-compliance;
- Punitive actions for non compliance to enable robust enforcement commensurate with the scale of non-compliance and the value of lost energy savings;
- A robust system for evaluating policy and program success;
- Regional and/or international cooperation/harmonisation on compliance to maximize the effectiveness of limited resources as well as leverage the benefits of compliance activities.

Against this background the **Product Quality, Monitoring, Verification and Enforcement** TF will be required to consider the following tasks and objectives to be further refined:

- The value of a robust, harmonized set of 'territory based' quality and testing standards for regions of the globe cannot be understated. With such a mechanism, well-performing products could be identified independently, allowing purchasers to select products based on value (price) while being assured of at least a minimum level of performance.
 - Collect information, analyze and benchmark international actions on 'lighting system':
 - Quality and performance (Qualiper, IEA, Citadel, other EU/US/ASIA projects, EuP/Energy Star/Asia Lighting Compact etc...)
 - Testing & certification programs
 - Formulate a Road Map:
 - Outlining barriers to the harmonisation of quality, performance and testing standards
 - Making recommendations required to move towards the adoption of territory based or global quality standards
- Compare and benchmark the methods and the obtained results and highlight best practice examples to be included in the Road Map and Policy Tool Kit.
- Make recommendations for countries on how best to protect their markets from low or bad quality products specifically.
 - How to improve information sharing exchange mechanisms - regional agreement on a common test procedure, a data-sharing plan, and ways to mutually recognize test results for standards and enforcement agencies.
 - Supervision of raw materials, shipping and distribution
 - Recommendations for training local ministries/departments to strengthen stakeholders responsible for oversight
 - Recommendation to strengthen enforcement of quality supervision through penalties for non compliance or profiling in local media - A number of countries need technical assistance in setting up the

- infrastructure (testing facility, development of standards, training of laboratory personnel, etc.) to certify the performance of CFLs to a common, regional level, as well as in recycling CFLs and dealing with end-of-life issues, including mercury content and safe lamp disposal.
- Government agencies, the private sector (including manufacturers and retailers of CFLs), and non-governmental organizations (NGOs) in the region should be incentivised by the TF recommendations to take concrete actions to increase user awareness of high-quality CFL and other energy saving products and ways to identify them, and support independent actions.
- Provide recommendations on Monitoring, Verification & Enforcement policy to interested countries and regions.

Expected outcome of the TF:

- An 'online' database of international actions/know how on quality performance and testing of lighting products.
- A position paper which clearly defines barriers to harmonisation in this area to be avoided
- A position paper which clearly highlights recommendations on regional or global harmonisation of product quality, performance, testing standards indicating examples of best practice in a variety of regions.
- Participating country guideline on how best to safeguard local markets from low or bad quality products.
- Guidelines on monitoring, verification and evaluation that could serve for standard makers, funding programs, market surveillance authorities in the future, to be included in the Road Map and in future guidance materials.

3. Task Force on Policy, Regulation and Voluntary Initiatives (PRIV)

One of the key aims of the enlighten initiative is to define a regulatory policy roadmap which is based on reviews of existing and planned strategies for regulatory phase-out in both developed and developing countries and regions worldwide.

The design of successful policy to transform markets at the lowest possible cost requires time, expertise and commitment of governments and public agencies. Such crucial resources are sometimes lacking in several countries, making any attempt to transform markets risky. To be efficient policy also has to harness the willingness of the private actors to carry on the required improvement. Therefore where policy dialogue is not the norm, broad-based market transformation policies and measures are at risk of being rejected by sectors of the market for which the policies are meant.

Therefore significant effort is required to incentivise buy in through the formulation of coherent harmonised policy. In order to achieve this, an international roadmap reflecting national and regional phasing-out plans will be developed, with subsequent reflection dedicated to guiding action (via use of the Road Map) on a wide range of issues including pace for phasing out obsolete technologies and introduction of new ones, quality requirements, support to national and regional initiatives, development of financing incentives and financial mechanisms, particularly carbon finance.

Task Force members should seek to understand the supporting policies that are being put into place to overcome specific local barriers to enable the phase-out of inefficient lamps in various countries. Such policies may include product registration or labelling, consumer or retailer promotional activities, environmental protection, recycling, support for industry transition, actions to support low income groups, etc.

This TF will be required to carry out the following tasks to be further reviewed, assessed and defined as appropriate:

- Review country level lighting phase outs and other relevant policies to highlight best practice examples to be used in the development of the Policy Toolkit and Road Map.
- Creation of a global phase-out diagram including an in-depth analysis of various regulatory phase-out regimes (e.g. phased implementation by wattage, total prohibition, inclusion of other performance criteria, etc) and develop outline diagram for the best strategy for phase-out.
- Review country level lighting voluntary initiatives
- Benchmark government and other funding programs in partner countries with those of the EU/US/ASIA.

- Make estimations of the larger stimulus effect on the economy as a whole of efficient lighting funded programs including energy savings, production, trade and training/education.

Expected outcomes of the TF may include the following:

- Data that could be used for establishing a policy roadmap based on best practice and dynamic section that makes an allowance on for progress tracking over the life of the project and beyond.
- *A clear and comprehensive policy toolkit* based on national experiences, to facilitate phase out programs at national level to include key factors for success and identified risks/barriers to successful market transformation.
- Other outcomes to be identified in TF discussions.

4. Task Force on Standards, Labels and Technology Evolution (TESL)

Governments have a key role to play in accelerating the adoption of energy-efficient lighting. A key action is the establishment of standards to prohibit the sale of the least efficient lighting technologies where high-efficiency, good-quality and cost-effective alternatives exist. They can also ensure that the energy costs and performance of lighting are visible in the market by labelling the energy performance of equipment and certifying the performance of entire light-using systems such as buildings and outdoor lighting.

A number of multilateral and bilateral initiatives are currently active on many aspects related to the transformation of the lighting market, either from the standard and quality standpoint such as ELI and the USAID Asian project, or from the regulatory standpoint, such as inclusion into building codes of specifications for lighting output per type of building use. The tendency has been for a plethora of national approaches to standards and labels development, leaving manufacturing, distribution and marketing with a potential array of compliance requirements for differing territories.

This tendency has been reversed in recent years with the adoption of 'federalised' lighting requirements in the EU, US and other countries and regions in Asia and South America. However the process of integration and alignment is slow and apart from sporadic cooperation in standards making, it will take time to untangle the national standards based approach. One of the key goals of the project therefore is to try and facilitate the harmonization of lighting standards at a global level as far as possible.

In order to do this effectively taking all points of view into account, it is necessary to have a combination of a detailed view of regulatory best practice in this area and an idea of the current state of art/technology evolution in on and off grid lighting. This way standard setting can be effectively linked to product performance that is current and/or anticipated in the near future without over or under stating requirements.

This TF will be required to carry out the following tasks to be further reviewed, assessed and defined as appropriate:

- Launch and supervise a benchmark study to compare the performance of energy efficiency lighting Standards and Labels (S&L) programs conducted by countries around the world:
 - Provide a comparison of each relevant element of lighting S&L programs.
 - Design and implement a methodology to rank each country's program for its overall effectiveness.

- Study outputs will scorecard countries and/or regional efforts on lighting products energy efficiency and provide evidence-based information on which to base policy decisions to improve programs or identify requirements for further study. The objective is for the final report to pull the market towards higher levels of lighting product efficiency and lay the foundation for strong and harmonized energy performance requirements at the global level.
- Produce bi-annual fact based regular reports on the current state of art/technology evolution/reviews in on and off grid lighting.
- Make recommendations as to how best to address harmonisation of standards & labelling programs and find solutions to increase the alignment of compliance requirements for differing territories:
 - Identify where this is already being done and to what levels of success (lighting sectors/applications, products etc)

Expected outcome of this TF may include the following:

- The resulting S&L study will provide policy-makers with a comparison of their lighting programs to most of the other countries and/or regions where such minimum energy performance standards (MEPS) and labels (both comparison & endorsement ones) have been implemented or are under preparation or revision.
- Recommendations as to how best to address the deharmonisation of standards & labelling programs with a view to proposing strategies and practical actions for increased alignment.
- Fact based regular reports on the current state of art/technology evolution/reviews in on and off grid lighting and provision of strategic recommendations to en.lighten.
- Other outcomes to be identified in TF discussions.

5. Task Force on Consumer, Environmental Protection and Recycling (CEP)

Efforts to phase out incandescent lamps across the world have brought replacement products for those to be phased out into sharp focus. Whereas incandescent lighting was considered to be a relatively 'safe' source of light, concerns have been voiced in many countries about the associated 'health effects' of compact fluorescent lamps (CFLs) and more recently Light Emitting Diode (LED) technologies.

It is well known that CFLs contain mercury which contributes to a large extent to the overall efficiency of CFLs as an effective replacement technology. However in the EU and US during incandescent phase out discussions public discussions prompted industry and regulators to quickly establish the realities of mercury use in CFLs to reassure the public that CFL's were safe to use and therefore environmentally and economically viable. In Europe the focus on environment health and safety issues was also extended to cover specific health related concerns with regard to the use artificial light including light intensity, alleged stroboscopic effects, light sensitivity or lupus syndrome, UV limits, influence on melatonin and effects of electromagnetic fields or EMF. Data on these areas will be needed to underpin the credibility of the CEP sections of the en.lighten global lighting Road Map due to be completed in 2011.

In view of the above developments, the CEP Task Force will gather and review scientific and other publications/papers and formulate position papers and recommendations on:

- '*Cradle to rebirth*' or lifecycle issues in lighting
- Environmental, health and safety aspects of lighting
- General consumer concerns regarding lighting including use of mercury & end of life treatment

This TF will be required to carry out the following tasks to be further reviewed, assessed and defined as appropriate:

- Form a global database of scientific and other publications/papers that can be used as the background content to answer questions about health & safety aspects of lighting from the press or other interested stakeholders.
- Provide draft answers to environmental, health & safety (EHS) questions raised by internal and external stakeholders
- Provide guidance document on justification of the use of mercury in CFLs and requirements for end of life treatment of CFLs
- Provide guidance document on LEDs from an EHS perspective and requirements for end of life treatment of LED products.

- Draft a global light source best practice position paper for 'Enhanced Producer Responsibility' (EPR) (Collection and recycling best practice at end of life) for inclusion in the Road Map and Policy Tool Kit.

Setting up a sustainable and effective solution for the collection and recycling schemes for end of life products involves more dimensions of which the infrastructural and logistics parts are often the easiest ones to organise. Other dimensions to be considered by the Task Force involve:

- Legislation and regulations** - An effective regulatory framework is the absolute basis to enable the proper organisation of EPR obligations. EPR in many cases creates a new market in the country, stipulating the roles and responsibilities of the various interested stakeholders for the first time. EPR legislation creates incentives in the market place and it is generating change through the whole supply chain. It creates, if not properly balanced, clearly defined, structured and controlled: uncertainty, nuisance and free riders which put a business at risk. EPR triggers change in the supply chain. In doing so, EPR needs to be integrated into the existing way of doing business and therefore needs to be aligned with the existing legal framework.
- Financing** - Depending on the legal, political, social, economic, demographic and geographic situation in a country, several models are conceivable to fulfill the financial side of the EPR obligations.
- Logistics, treatment, reporting and information and stakeholder communication/involvements** - In organizing the operational take back of end of life products, the TF position will need to take into account several items:
 - The available infrastructure to collect, transport and recycle waste and the public perception of hazardous waste management;
 - The potential need for incentives to stimulate collection;
 - The social and economic situation the country is in & the power/alternative interests of specific stakeholders e.g. waste management companies, municipalities, etc.
 - The available recycling capacity and the geographic/demographic situation and existing hazardous waste and other relevant regulations;
 - The level of governmental interest and active involvement in enforcing the law and possibilities for synergies.
- Reporting and information** - EPR regulations mandate producers to provide information to a given set of stakeholders on different items. For instance these might include the following:
 - Reporting to government and/or public authorities on:
 - i. Amount of products they have put on the market & on the amount of waste which has been collected and recycled;
 - ii. Investments made in terms of involving the public

- e. **Stakeholder communication and engagement-** As is the case for any other aspect of business, both internal and external stakeholders have a number of expectations from the industry regarding the fulfillment of EPR obligations. It is important that these expectations are pro-actively managed on an ongoing basis, while fulfilling those expectations which the industry has committed themselves to. The TF will be required to carry out a country a stakeholder analysis.

Some of the expected outcomes of the TF may include the following:

- A global database of scientific and other publications that can be used as the background content to answer questions about health and safety aspects of lighting from the press or other interested stakeholders.
- Frequently asked questions and responses for environmental, health and safety (EHS) concerns
- General guidance document on justification of the use of mercury in CFL's and requirements for end of life treatment of CFL's
- General guidance document on LED's from an EHS perspective and requirements for end of life treatment of LED products.
- Draft a global light source best practice position paper for 'Enhanced Producer Responsibility' (Collection & Recycling best practice at end of life) for inclusion in the Road Map & Policy Tool Kit.
- Other outcomes to be identified in TF discussions.

6. Task Force on Off Grid Lighting (OGL)

Off-grid lighting products that use LED and CFL technology can deliver high-performance, affordable lighting services to low-income people who currently rely on kerosene and other fuel-based lighting sources. The widespread use of modern off-grid lighting technologies can also deliver significant health and environmental benefits by reducing indoor air pollution and CO2 emissions. Developing a large, dynamic, and sustainable market for modern off-grid lighting will require careful attention to product quality. Poor quality off-grid lighting products are swiftly entering Asian and African markets. Low income end-users who purchase inferior goods frequently suffer due to the bad quality of the products. Their bad experiences, which spread rapidly by word of mouth and other avenues, can undermine consumer confidence in LED and CFL-based off-grid lighting technology.

Focus areas and potential tasks for the Task Force include but are not limited to the following areas:

Product Quality and Performance

Define an effective product quality assurance strategy for off-grid lighting products and in doing so review the following areas:

- Establish the state of art of the science and technology (performance, light quality, lifetime, affordability etc) of the most up to date off grid lighting technologies, and monitor major trends in component and product development
- Formulate the most adequate approaches for a road map to support continued improvements in the quality and affordability of off grid lighting products in partnership with the off grid lighting Stakeholder Association created in the framework of the International Finance Corporation/World Bank Lighting Africa project (e.g. development of a quality seal, provision of technical assistance to manufacturers etc.).

Monitoring, Verification and Enforcement

To ensure that resulting product quality approaches are enforced:

- Devise standardised product testing and field tests to monitor product performance in the field and users preferences
- Monitor the development of the off grid industry (e.g. numbers and variety of products sold, exchange information on emerging business models)
- Monitor and evaluate impacts of introduction of modern lighting to off grid households and businesses Recommend possible additional actions for the achievement of improvements in product quality and performance.

Policy, Regulation and Voluntary Initiatives (Best Practice)

In order to address the numerous regulatory and policy barriers that are stifling the development of off grid lighting markets the Task Force will recommending a coherent approach to regulating off grid lighting.

- On the basis of this, a policy dialogue with selected governments (representative of the universe of developing countries with large unelectrified population) and regional organizations (e.g. ECOWAS or EAC) should ideally be conducted to help alleviate such barriers and improve commerce and participating country environments themselves.
- Provide market intelligence, map and analyze policy and regulatory barriers such as import tariffs, taxes and subsidies for fossil fuels
- In response to the industry calls to provide greater transparency of the scope of the emerging market opportunity the Task Force will collect and disseminate publicly available market information to interested stakeholders.

Consumer, Environmental Protection and Recycling

Explore the implications, status quo, best practices and possible approaches to minimize impacts on the environment and human health associated with the entire lifecycle of products, from "cradle to rebirth", from component manufacture to disposal practices at end of life. This may include the following components:

- **Study on environment, health and safety implications for off-grid lighting** – baseline assessment of environmental and health implications of off-grid lighting products. The study should analyze both positive and negative impacts of introducing high-quality off grid lighting products to the off grid market to replace kerosene lamps and the disposable battery torches and lanterns currently available at the market.
- **Component Lifecycle Analysis** – assess strategies to minimise the negative environmental impact of off-grid lighting product components (batteries, light fixtures, housings, etc.) on the environment, from manufacture of raw materials, through assembly, distribution, use, and disposal – e.g. analyze how component and product quality can improve environmental sustainability – e.g. by reducing the use of toxic materials and prolonging product life
- Brainstorm on how **waste disposal/recycling programs** could be set up once off-grid lighting market grows in size to make organized waste disposal/recycling possible. This may consider the following aspects:
 - Waste treatment legislation, rules and regulations - An effective regulatory framework is the basis to enable the proper organisation of waste collection obligations.

- Financing - Depending on the legal, political, social, economic, demographic and geographic situation in a country, several financing models can be conceived. Economics may be a major constraint to developing a meaningful waste disposal/recycling program and therefore financing from public sources may need to be considered.
- Logistics, treatment, reporting and information - available infrastructure to collect, transport and recycle waste and the public perception of hazardous waste management; incentives to stimulate collection; available recycling capacity and the geographic/demographic situation. Take into account the relative dispersion of the off grid households and capacity financing/constraints of developing countries.
- Reporting and information – take back regulations may oblige producers to provide information on different items detailing amount of products on the market.

Communicating about Off-Grid Lighting

- Form global database of scientific and other publications that can be used as the background content to answer questions about general aspects of off grid lighting (quality, performance, health & safety etc) from the press or other interested stakeholders.
- Provide draft answers to environmental, policy, quality assurance and health and safety (EHS) matters
- Draft a communication strategy on all aspects of off grid lighting addressed above with a view to this communication to be regarded as the “de facto” best practice source of information for off grid lighting to be included in the en.lighten Road Map.

This TF will be expected to produce the following outcomes to be further reviewed, assessed and defined as appropriate:

- Fact based regular reports on the current state of art/technology evolution/reviews in off grid lighting.
- Practical recommendations on quality assurance in support of country programs.
- Recommendations on how best to deal with barriers to market access for off grid lighting products and services.
- An assessment and proposal for consumer and environmental protection approaches for off grid lighting.
- Complete user friendly communications package on off-grid lighting for policy makers, market, quality surveillance authorities and the interested public.
- Other outcomes to be identified in TF discussions.