TERMS OF REFERENCE

Facilitating climate change adaptation in transport through addressing the energy-environment linkage - Development and implementation of a monitoring and assessment tool for CO₂ emissions in inland transport to facilitate climate change mitigation

UN Development Account Project 10/11E

I. Purpose

The purpose of this evaluation is to assess the extent to which the objectives of the UN Development Account project Facilitating climate change adaptation in transport through addressing the energy-environment linkage - Development and implementation of a monitoring and assessment tool for CO₂ emissions in inland transport to facilitate climate change mitigation (10/11E) were achieved.

II. Scope

The assessment will be guided by the objectives, indicators of achievements and means of verification established in the project document. The evaluation will consider the impact of the project on: a) the awareness of the causality and interrelationship between transport, energy and CO₂ emissions; and b) the enhancement of the ability to monitor and assess current and future energy consumption patterns of the land transport modes, as well as the related CO₂ emissions. In particular, the evaluation will address the efficacy of the project with respect to the development, implementation, distribution and use of a monitoring and assessment tool capable to assist users in the selection of effective measures to reduce CO₂ emissions in the inland transport sector while addressing the energy-environment linkage. The evaluation will consider potential spillovers from the project and will provide recommendations on initiatives to enhance its impact. As per the requirements of the UNDA, the evaluation will be conducted immediately after the end of the project. It will therefore not assess the medium or long-term impact of the project.

III. Background

In transport, the evolution of CO₂ emissions in transport is influenced by the size of the population and way it changes, the structure and growth of economic activities, the nature of trade and its evolution characteristics. In parallel, transportation is affected by the evolution of energy prices and a number of policy instruments targeting land use allocation, fuel taxation, consumer information and road pricing. The combination of these elements led to fast growth in the global vehicle activity that was only partly counterbalanced by improvements of the vehicle fuel efficiency. This resulted in an increase in the total fuel consumption of the global transport sector. Combined with the strong dependency of transport on fossil fuels, this increase in fuel consumption has also increased the contribution to global CO₂ emissions from the transport sector.

The capacity to appropriately evaluate the effect of the elements influencing the evolution of transport activity, energy use and the related CO₂ emissions is important to facilitate the adoption of climate change mitigation measures in transport. The same capacity can also enable governments and the private sector to analyze different development scenarios. This capacity was limited by the lack of publicly available tools to assess the impact of policies and changes in transport activity, energy use and CO₂ emissions. This was especially relevant in developing countries, where most of the publicly available tools target the assessment specific transport projects.

This global project was devised in response to the calls from the global meeting of transport ministers, held in Leipzig on 28-30 May 2008 to address the energy and climate change challenges for the transport sector, and the Ministerial Conference on Global Environment and Energy in Transport (MEET), held in Tokyo in January 2009, to improve energy efficiency and to reduce greenhouse gas emissions in the transport sector. The project was designed provide a freely available assessment tool capable of linking transport activity, energy use and CO₂ emissions with national and local drivers. This modelling tool, meant to foster sustainable transport policies For Future Inland Transport Systems, was named ForFITS. Activities throughout the project aimed to improve the capacity, via the use of ForFITS, to assess transport, energy and CO₂ emission parameters in a range of different contexts, also taking into account that the wide variations in terms of availability of information and statistics.
The project was funded by the 7th tranche of the UNDA, and was implemented from January 2011 to December 2013. ECE coordinated the global implementation of this project with the other UN Regional Commissions - ECLAC, ESCAP, ESCWA and ECA - in their respective regions. The initial activities of project focused on the measurement, reporting and verification of the statistical information concerning transport, energy and CO₂ emissions. It led to a report assessing available statistics, policy instruments and modelling tools. The central part of the project concentrated on development of the ForFITS model. This resulted in the free on-line release of the model and its user manual. The final part of the project focused on the parallel development of pilot cases and the implementation of capacity building activities, including workshops and training sessions in all five regions. These activities aimed to raise the awareness of policy makers of this tool, and to enhance the skills of local transport, energy and CO₂ emission policy analysts for the using ForFITS. The workshops also promoted dialogue across a wide range of stakeholders and encouraged the exchange of national experiences.

Awareness raising and training sessions were organized during the project, in all regions. Pilot cases were developed for each of the training sessions and used as training materials, including specific datasets in the ForFITS input file and specific ForFITS model runs. Additional training materials, mainly consisting of presentations, were prepared to facilitate the understanding of the different parts of the model in training sessions and to enhance the impact of the project in awareness raising events.

IV. Issues

The evaluation will assess the following key issues:

- Check that the activities planned during the project were effectively performed and that they have contributed to the aims of the project as intended, using the indicators of achievement and means of verification described in the project document;
- Provide an assessment of the quality of these activities and the supporting materials prepared in the course of the project, with the view to promoting ongoing sustainability of the project’s achievements; and
- Propose potential follow-up activities to increase the impact of the project, and/or how to use the assets generated during the project (e.g. ForFITS model, user manual, training materials, and network of contacts) for future activities.

V. Methodology

A desk review will be undertaken of the materials prepared in the course of the project, including the review of statistics, policies and modelling tools on transport, energy and CO₂ emissions, the questionnaire developed to gather inputs for the preparation of the review, the ForFITS model, its user manual, the information of pilot countries contained in the last model release, the materials related to the organization and implementation of the workshops (agendas, lists of participants, tests, surveys, presentations and other items). If appropriate, the evaluation may rely on other methods to collect information in order to explore and triangulate the findings of the desk review, and may include interviews with key participants in the project, including not only beneficiaries but also meeting facilitators and other experts. The external evaluator will need to propose a specific and tailored methodology upon the inception briefing of the project.

VI. Evaluation Schedule

The materials collected and produced during the course of the project will be provided to the external evaluator by 31 January 2014. The evaluator will collect additional data, if required, and conduct data analysis in February, so that a draft report can be produced by the 21 February 2014 for comments. Appropriate feedback will be given by 28 February 2014, so that the final report can be delivered by 15 March 2014.
VII. Resources

As per the requirements of the UNDA, 2% of the project budget is allocated for external project evaluation. The work of the external evaluator will be managed by the project manager and supported by two ECE staff members. They will address the queries of the external evaluator and help him/her to collect relevant materials and to organize interviews with key stakeholders. A remuneration of $10,000 has been earmarked in the project to pay for the work of the external consultant in the period 1 February 2014-15 March 2014.

VIII. Intended Use/Next Steps

The evaluation is expected to provide guidance on how to enhance the impact of the project. The advice provided may include recommendations on how to seek funding opportunities and partnerships to: a) optimize the use of the assets and training materials developed in the course of the project, b) improve their diffusion and outreach capacity; c) strengthen the networks developed; d) ensure that the assets generated (such as the ForFITS model) are properly used, e.g. by providing assistance to model users and maintaining the assets developed up to date; and e) further develop these assets in the future. These recommendations can be used to inform UNECE’s work in the period 2014-2015. The outcomes of the evaluation will also contribute to the broader lessons learned of the UNDA, managed by UN DESA.

IX. Criteria for Evaluators

Evaluators should have:

- an advanced university degree or equivalent background in relevant disciplines, with specialized training in areas such as evaluation, project management, social statistics, advanced statistical research and analysis.
- relevant professional experience in design and management of evaluation processes with multiple stakeholders, survey design and implementation, and project planning, monitoring and management.
- demonstrated methodological knowledge of evaluations, including quantitative and qualitative data collection and analysis for end-of-cycle project evaluations.

Evaluators should declare any conflict of interest to UNECE before embarking on an evaluation project, and at any point where such conflict occurs.

Send your latest updated curriculum vitae and/or UN Personal History Form (P11) to Catherine.haswell@unece.org by 29 October 2013.