



CLUSTER CONCEPT 3 – PLANNED PHASE I (2009-11) ACTIVITIES

Cluster Topic: Integrated Spatial and Strategic Approach to Facilitate Sustainable Development in the East West Economic Corridor

Activity 3	Climate Change Mitigation for the East West Economic Corridor
Scope of Work	<p><u>Carbon sequestration by greening of transport corridors</u></p> <ol style="list-style-type: none"> 1. Collection and update of GIS and demographic data (population, land use, area maps, area development plans, economic and trade, transport, emissions, institutions, ongoing restoration and forestry projects); 2. Clarification of land use and land user rights/institutional mandates; 3. Sample plots and site surveys for species and site matching with rainfall data, water availability and nursery potential at village community level and/or sub-district/district level; 4. Feasibility/suitability study of bio-fuel yield plants, including jatropha, along the EWEC for carbon sequestration; 5. Identification and mapping of target hectares, locations, cost estimates; and 6. Write up of draft climate change mitigation/carbon sequestration investment plan with sequestration targets, costs and benefits with a tentative implementation schedule reflecting nursery and seedling production output, planting season, transport to site, planting, tending and maintenance, overall carbon sequestration potential, and institutional set up for implementation, maintenance and monitoring. <p><u>Reducing emissions from freight traffic in the EWEC (study to assess policy, incentives framework and technical feasibility)</u></p> <ol style="list-style-type: none"> 1. Alignment with the Vientiane Plan of Action for GMS Development (2008-2012); 2. Establishing partnerships with manufacturers promoting carbon friendly production; 3. Commissioning sector/sub-sector and stakeholder assessments in conjunction with the GMS Business Forum; 4. Undertaking assessment of current policy and incentive /disincentive framework and working out recommendations for policy shift; 5. Holding discussions and identifying possible financing mechanisms for supporting modernization of haulage and passenger fleets plying the transport corridors, and if possible expansion of this modality to other routes and urban centers; 6. Identifying institutional mandates and submitting policy and incentive framework for approval and adoption; 7. Assessing possibilities of documenting and registering the



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	<p>process and cost/benefits of investments and carbon offsets for the carbon markets; and</p> <p>8. Write up of draft climate change mitigation/carbon offset report for wide dissemination among GMS countries.</p>
<p>Expected Outputs</p>	<p><u>Carbon sequestration by greening of transport corridors</u></p> <ol style="list-style-type: none"> 1. Identification, location, size and suitability of bare land available within a reasonable distance of the transport corridor for reforestation and bio-fuel yielding crop plantation; 2. Clarification of current land use (following national or regional classification/typology/coding/legend) and land management/ownership regime (land use rights) and institutional mandates; 3. Suitable sampling of site and species/soil matching; 4. Species typing and restoration methodology including functionality (watershed, soil conservation, protected area gap filling, commercial plantation with carbon sequestration cycle between rotations including bio-fuel option); 5. Institutional arrangements at national level and along the transport corridor or segments thereof with indicative partnership arrangements at local level and fund channeling modalities (e.g. CDF/VDF fund modality); and 6. Cost estimates and investment volumes (framework) with number of target hectares planting models, overall project time scale, and potential list of investors. <p><u>Reducing emissions from freight traffic in the EWEC</u></p> <ol style="list-style-type: none"> 1. Document possible costs savings for fleet operators of adopting cleaner vehicles with the aim to stimulate development of public-private partnership model(s); 2. Assessment of business climate in the freight business, analysis of stakeholders (haulage companies), demand survey on fleet modernization and required regulatory framework conditions (both trucks and buses); 3. Commitment by freight engine manufacturers and suppliers in Southeast Asia regarding carbon partnerships (cleaner engines and cleaner fuels, carbon reduction, carbon avoidance schemes); 4. Policy analysis and recommended policy and incentive framework for the ministries of Finance and Planning, Trade and Industry, and Transport in selected GMS countries to introduce: (i) fuel economy regulations to promote the introduction of more fuel efficient engines, (ii) a road map for the accelerated introduction of more stringent emission standards on vehicular emissions (introducing EURO III/IV) for new vehicles as well as stricter in-use emission standards in both cases especially for heavy duty vehicles,



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	<p>(iii) a roadmap for the accelerated introduction of cleaner fuels to enable the use of cleaner engines;</p> <ol style="list-style-type: none"> 5. Establish regular information exchange among relevant stakeholders in participating countries to ensure that policy frameworks are consistent and in the case of cross border transport, ensure that environmental benefits are not compromised by inadequate coordination; 6. Develop financing models for fleet modernizations which combine local internal financing aided by incentives such as tax credits and external financing through the identification of financing institutions and development agencies committed to support soft loans and concessionary lending conditions for supporting climate carbon reduction and carbon avoidance promotional program; 7. Cost/benefits assessment of investments and carbon emission reductions compared to global and national targets (both within the UNFCCC framework as well as on a voluntary/unilateral basis); 8. Benchmarking and documentation of anticipated co-benefits and positive effects on reduction of pollutants such as particulate matter (PM_{2.5} and PM₁₀), SO_x, NO_x, CO, ozone, and CO₂; and 9. Documentation for registration of project as a possible CDM /tradable CER on the voluntary carbon market.
<p>Budget & Period of Utilization</p>	<p>The estimated cost of the planned scope of work is USD 244,125 to be utilized from January to December 2009.</p> <p>A budget summary for Activity 3 is provided below. Detailed activity budgeting assumptions and work plans are provided in Annex 2.</p>
<p>Estimated Completion Date</p>	<p>December 2009</p>
<p>Implementation Arrangements</p>	<p>The EOC will be responsible for overall planning, technical quality control and M&E in coordination with WGE focal points.</p> <p>The activity will be conducted by a team of national and international experts in collaboration with, but not limited to:</p> <p>Carbon sequestration by greening of transport corridors – National forestry departments/agencies in the GMS countries, various local government agencies along the EWEC, local non governmental organizations, and the University Network collaborating with the CEP.</p> <p>Reducing emissions from freight traffic in the EWEC – ministries of Finance and Planning, Transport and Industry in GMS countries, in close collaboration with the GMS Working Group on Transport and regional organization like CAI-Asia Center. Other potential collaborators include freight manufacturers, freight engine converters, logistics and transporter associations, GMS</p>

