

### Global Environment Facility

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# ELEMENTS OF A GEF OPERATIONAL PROGRAM ON TRANSPORT

#### Recommended Council Decision

The Council has reviewed the document GEF/C.12/14, *Elements of a GEF Operational Program on Transport* and approves it subject to the comments made during the Council meeting. The Council requests the Secretariat to develop and publish the Operational Program, elaborating upon program outcomes, risks and assumptions, and indicators to measure and monitor impact.

#### INTRODUCTION

- This document responds to the request of the GEF Council, made at its tenth meeting in 1. November 1997, asking the GEF Secretariat to prepare the elements of an Operational Program in the Transport Sector for its review and approval prior to the development of the Operational Program.
- 2. The elements proposed in this paper have been prepared by the Secretariat, in consultation with the Implementing Agencies, and take into account advice received from STAP and comments submitted by interested NGOs.
- The elements to be addressed in the transport operational program are outlined in the first 3. column of Table 1. These elements follow from operational principles<sup>1</sup> and strategic considerations Council approved in Chapter 1 (Policy Framework) and Chapter 3 (Climate Change) of the Operational Strategy. The second column of Table 1 lists the corresponding approved principle or strategic consideration.

#### PRINCIPLES UNDERLYING THE ELEMENTS OF THE TRANSPORT OPERATIONAL PROGRAM

- 4. The first element that will guide the development of activities under this program is country ownership. It follows from principle 4 of the Operational Strategy. GEF will only finance activities for which the national focal point has confirmed that the activity is a national priority. Information about national priorities and opportunities in the Initial National Communication to the UNFCCC will be particularly helpful in identifying project ideas. To enhance country ownership, the focus will be on those activities that also provide multiple domestic benefits.
- The second element follows from Principle 7 of the Operational Strategy and ensures that local constituencies are involved, that they do not oppose proposed activities, and have a stake in project outcomes. To the extent possible, use of existing transport infrastructure, joint ventures and local manufacturing will be emphasized.
- As surprises are common in technology promotion programs, GEF will maintain sufficient 6. flexibility to respond to changing circumstances. This adheres to the fifth principle of the Operational Strategy. The Secretariat will consult STAP should a need arise to modify the scope

 $<sup>^{1}</sup>$  Ten Operational Principles were approved by the Council in Chapter 1 of the Operational Strategy. For the transport operational program, 11 elements are identified, one each from Operational Principle numbers 4, 5, 7 and 9, and seven elements from the third Operational Principle (Operational Strategy, page 2). However, it is understood that all existing approved ten principles will continue to apply. Thus this operational program will follow CoP guidance about long-term program priorities (Principle 1) and eligibility requirements as set forth in paragraph 9 of the Instrument (Principle 8). Similarly, existing policies about agreed incremental costs (Principle 2), regular monitoring and evaluation (Principle 10), and full disclosure of non-confidential information (Principle 6) will continue to apply.

of this operational program.

- 7. Given the characteristics of transport systems, it is understandable that seven of the proposed eleven elements should be directly concerned with the cost-effectiveness principle (Principle 3). This operational principle requires GEF to ensure the cost-effectiveness of its activities to maximize global environmental benefits. The first of these (Element 4 in Table 1) enjoins GEF to reduce additional projects risks through targeted research, capacity building and technical assistance.
- 8. In order to increase the chances of a market take-off for alternative sustainable technologies and their integration with sustainable development, a concentration of resources is required in each climate change operational program capitalizing on synergy and scale effects. Quite obviously, there is a trade-off with attempting to reduce portfolio risks by diversifying and a balance would have to be struck.
- 9. GEF projects strive to ensure social, financial, and environmental sustainability, including that of global environmental benefits. The Operational Strategy identified at least four strategic considerations specified under this broad sustainability criterion. Each in turn leads to a separate transport element. The first of these four pertains to encouragement of conducive policy environments. GEF activities are designed to support national policies that provide adequate incentives for development paths that are sound from a global environmental perspective.
- 10. Sustainability is more likely if GEF programs and projects in the transport sector address the underlying causes of global environmental deterioration and focus on long-term measures, and not merely benign forms of current, but unsustainable, activities.
- 11. In response to the strategic consideration that GEF finance actions that are cost-effective and catalyze complementary actions or have a multiplier effect, Chapter 3 of the Operational Strategy identified a two-pronged approach towards the development of long-term operational programs. The first approach aims to remove barriers to implementation of climate-friendly, commercially viable technologies, as exemplified in Operational Programs 5 and 6<sup>2</sup>. Under this component in the operational program, GEF will promote, amongst others, non-motorized transport technologies and measures, especially in medium-scale growing cities. Paragraph 16 below provides further specificity.
- 12. The second prong of this strategy is to reduce costs of prospective technologies that are not yet commercially viable, to enhance their commercial viability, as in Operational Program Number 7. Under this component, GEF will attempt to enhance the viability of new emerging sustainable transport measures by supporting demonstrations of measures where the primary market is in recipient countries. Support under this component is important for solutions to transport problems in large metropolises. Further specificity is provided in paragraph 17 below.

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<sup>&</sup>lt;sup>2</sup> The three existing operational programs in Climate Change are as follows: Number 5—Removal of barriers to Energy Efficiency and Energy Conservation; Number 6—Promoting the Adoption of Renewable Energy by Removing Barriers and Reducing Implementation Costs; and Number 7—Reducing the Long-term Costs of Low Greenhouse Gas-emitting Energy Technologies.

- 13. To be cost-effective, GEF activities should avoid the transfer of negative environmental impacts between focal areas. This leads to the next element (number 10) that would require adequate environmental controls and safeguards.
- 14. The final operational principle guiding the development of this Operational Program emphasizes GEF's catalytic role and leveraging of additional financing from other sources in order to maximize global environmental benefits (Principle 9). Projects that are able to raise complementary domestic, bilateral, multi-lateral and private sector co-financing in support of transport program objectives would receive a priority.

#### DEVELOPMENT OF THE TRANSPORT OPERATIONAL PROGRAM

- 15. The objective of the transport operational program will be to reduce GHG emissions from passenger ground transport systems in recipient countries by facilitating commitments to adopt sustainable low-GHG transport measures and disengagement from present unsustainable measures. To achieve this objective, it is proposed that the transport operational program allow for activities that follow the two approaches in operational programs 5 and 6 on the one hand (Element 8), and in operational program 7, on the other (Element 9).
- 16. The first approach would promote the application, implementation, use and dissemination of commercial and near-commercial climate-friendly technologies where a reduction in greenhouse gas emissions would result. Examples would include the encouragement of pedestrian and bicycle lanes, and facilitating modal shifts from personal transport to mass transit. GEF would also support awareness building, assessment and analysis, institutional reform and strengthening, policy adjustments, regulatory measures and strategic transport and land-use planning. Learning and information dissemination will be integral to widespread dissemination of successful examples. Some activities should not be supported by GEF financing in this operational program. These would be activities that attempt to reinforce commitment to present unsustainable systems. As in Operational Programs 5 and 6, each project in this category would be expected to:
  - a. Identify all the barriers to the implementation of the sustainable transport system and propose specific measures to remove them.
  - b. Assess the contribution that the use of the system will make to the reduction of greenhouse gas emissions;
  - c. Estimate costs, financial requirements and time horizon required to implement the measures identified:
  - d. Demonstrate sustainability of these measures after GEF support has ended;
  - e. Indicate how the project will be monitored and evaluated.
- 17. The second proposed component of this operational program would be to reduce the costs of prospective sustainable transport technologies that have not become widespread least-cost alternatives. This is partly because they are new and still expensive and partly because the

substantial external costs (such as pollution, noise, accidents and greenhouse gas and other emissions) of the prevalent technologies are not reflected adequately in current price signals. As in Operational Program 7, through learning and economies of scale, GEF will strive to ensure that their costs decline to commercially competitive levels. These price declines would be the primary programmatic benefit of this operational program. This component differs from technology-applications in Operational Program 7 in that whereas in Operational Program 7 the technology is the focus of intervention and not the location, here both location and the measure are important. Examples under this component would include fuel-cell-powered or battery-operated electric 2-and 3-wheelers, hybrid buses, fuel-cell (hydrogen)-powered buses and advanced biomass to liquid fuel conversion technologies. The last two of these are included currently in Operational Program Number 7. There are four PDF proposals for fuel cell buses in the current pipeline, but no fuel conversion projects have been submitted to GEF thus far. As for Operational Program 7 proposals, each project proposal in this category will be required to:

- a. justify the choice of the sustainable transport system based on scientific and technical considerations, the resource base in the host country, and the prospects for sustainability and replicability;
- b. set out the programmatic objective and the programmatic impact of GEF;
- c. identify all the links in the transport energy pathway, elements in the development sequence, and identify critical bifurcation points;
- d. estimate the level of funding required to achieve the programmatic objective and identify the necessary targeted research, capacity building and investment needs;
- e. estimate the financial requirements and the time horizon of proposed activities; and show how the programmatic benefits (price reductions) will be monitored.
- 18. Once the Council has approved these elements, the Secretariat will develop and publish the Operational Program following a similar format to that adopted for the existing operational programs. This document will also elaborate upon program outcomes, risks and assumptions, and indicators to measure and monitor impact.

TABLE 1: ELEMENTS OF A GEF OPERATIONAL PROGRAM ON TRANSPORT

#### **Elements of the Transport Operational Program**

## **Approved Operational Principle** and Strategic Consideration

#### 1. Ensure Country Ownership

GEF will concentrate on providing support where there is a National Communication to the UNFCCC or other information about national transport priorities and opportunities. Moreover, GEF will focus on those activities that also provide multiple domestic benefits (such as, improvements in transport safety, air quality, traffic congestion, etc.)

Principle 4: GEF projects are country-driven and based on national priorities designed to support national development. A further strategic consideration in support of this principle is that GEF activities are designed to be consistent with national initiatives.

#### 2. Involve Local Constituencies

GEF will ascertain the presence of local support, lack of opposition from local constituencies, the possibility of using existing transport infrastructure to the extent possible; ensure that stakeholders participate in technology development and commercialization; and that the prospects for local manufacturing and joint ventures are good.

**Principle 7**: GEF projects provide for consultation with, and participation as appropriate, of the beneficiaries and affected groups of people.

#### 3. Maintain Flexibility to Respond

To minimize the risk of continuing to back technologies with declining prospects of market acceptance, the scope of this operational program will not be fixed indefinitely but will be reviewed and modified on the basis of new information and experience, in consultation with STAP. An application could be removed from this program say, upon reaching market goals. Likewise, this program will consider new applications as technological breakthroughs bring other solutions to the forefront.

**Principle 5**: GEF is to maintain sufficient flexibility to respond to changing circumstances, including evolving guidance of the Conference of the Parties and the experience gained from monitoring and evaluation activities.

#### 4. Reduce Additional Project Risks

GEF will initially focus on those sustainable transport measures for which basic RD&D has been largely accomplished and the remaining technological barriers and risks are small and manageable. GEF will support targeted research on adaptation of sustainable technologies to local conditions, and on matching of country resource endowments to potential cost-effective applications. GEF will also support capacity building and technical assistance for reducing uncertainties about costs, performance and benefits, and strengthen local capabilities to evaluate, operate, manage, and maintain new sustainable transport interventions.

Principle 3: GEF will ensure the cost-effectiveness of its activities to maximize global environmental benefits. Several strategic considerations follow from this principle. GEF is to reduce risk caused by uncertainty including additional technical project risk through additional capacity building to manage new systems. Also, GEF is to finance programs to advance the scientific and technical capacities in recipient countries to manage global environmental threats.

<b>Elements of the Transport Operational Program</b>	Approved Operational Principle and Strategic Consideration
5. Balance Portfolio Diversification and Strategic Concentration of Resources  To reduce portfolio risks and to increase geographical coverage, the scope of this operational program should not be too narrow. To increase the chances of a market take-off for sustainable technologies and their integration with sustainable development, however, a strategic concentration of resources is required. GEF proposes to focus on passenger ground transport as opposed to freight, water-based or air transport.  Transport applications recommended for initial emphasis in Operational Program 7 will be moved to this program. Elements 7-9 below provide further specificity.	Both considerations follow from the cost-effectiveness principle ( <b>Principle 3</b> ): One way to manage the risk caused by uncertainty is to minimize portfolio risk by diversifying. The other requires GEF to increase synergy and scale effects by a strategic concentration of resources.
6. Encourage Conducive Policy Environments GEF assistance in conducive recipient country environments will provide more sustainable benefits, especially in those markets where severe energy price and other distortions do not tilt the playing field against sustainable transport. A macroeconomic and policy environment that allows and encourages fair competition is desirable for promoting sustainable transport systems. These should not be penalized by special taxes or by subsidies provided to competing but environmentally unsustainable systems.	A strategic consideration under <b>Principle 3</b> pertains to various forms of sustainability. GEF activities are designed to be socially, financially, and environmentally sustainable, and strive to ensure the sustainability of global environmental benefits. GEF activities will be designed to support national policies providing adequate incentives for development paths that are sound from a global environmental perspective.
7. Focus on Long-term Solutions GEF assistance should be limited to activities that promote a shift towards long-term sustainable transport measures.	Following from <b>Principle 3</b> , sustainability is more likely if GEF programs and projects address the underlying causes of global environmental deterioration. And, the focus of GEF activities will concern long-term measures, and not merely benign forms of current, but unsustainable activities.

Elements of the Transport Operational Program	Approved Operational Principle and Strategic Consideration
8. Promote Measures for Sustainable Transport	g
GEF will strive to remove barriers to commercially viable and near-commercial transport measures. GEF will also support capacity building and planning to ensure that climate-friendly options, including non-motorized transport options are fully considered in regular transport and land-use planning. These activities are specially important for medium scale growing cities that are not yet locked into current fossil-fuel based, and therefore unsustainable, personal transport systems.	Following <b>Principle 3</b> that GEF finance actions that have a multiplier effect, Chapter 3 of the operational strategy chose a two-pronged approach. The first approach attempts to remove barriers to implementation of climate-friendly, commercially viable technologies, as in Operational Programs 5 and 6.
9. Enhance Commercial Viability of Emerging	
Sustainable Transport Measures  Transport Operational Program proposes to incorporate both prongs of the operational strategy in Climate Change. The choice of sustainable transport measure will be based upon the prospects for reduction in costs and the contribution that GEF financing could make to those cost reductions, the extent to which primary market is in recipient countries and therefore, a lack of multi-national company interest. Cost reductions will be accomplished by promoting technology transfer, joint ventures, local manufacturing, learning by doing, and achieving economies of scale. Whereas in Operational Program 7, technology was the focus of intervention and not the location, for activities here under this element, measure and location are both important.	Also following from <b>Principle 3</b> that GEF finance actions that have a multiplier effect, the second prong of this strategy is to reduce the costs of prospective sustainable transport technologies since most are not yet commercially viable. The objective would be to enhance their commercial viability as for technology-applications in Operational Program 7.
<ul> <li>10. Avoid Negative Impacts Adequate environmental controls and safeguards would be required. Thus concerns about the toxicity of methanol, the explosiveness of hydrogen, the recycling and safe handling of lead-acid batteries would need to addressed in relevant projects.</li> <li>11. Emphasize GEF's Catalytic Role</li> </ul>	Also following from <b>Principle 3</b> is a strategic consideration asking GEF to avoid transfer of negative environmental impacts between focal areas.
Since the cost-effectiveness of GEF activities will be higher in projects where complementary domestic, bilateral, multilateral, and private sector co-financing in support of transport program objectives can be mobilized, such projects would receive a priority.	Principle 9: In seeking to maximize global environmental benefits, the GEF will emphasize its catalytic role and leverage additional financing from other sources.