

# Cleaner Vehicle Fleets in Latin America and the Caribbean

## Training Agenda and Design

24<sup>th</sup> – 25<sup>th</sup> September 2009, Santiago, Chile

### Day 1

<i>Time</i>	<i>Main Component</i>	<i>Details and Remarks</i>
9:00	<b>Registration of Participants</b>	
9:30	<b>Welcome and Introduction</b>	A quick round of introduction (or perhaps a preliminary ice breaker) will be done. An expectation setting exercise shall also be conducted.
<b>Session 1: Sustainable Transport and the Importance of Cleaner Fleet Management</b>		
10:00	<i>Transport and the Environment: Energy, Air Quality and Climate Change</i>	<p>This section of the presentation aims to contextualize the use of the Clean Fleet Management Toolkit by laying down the facts about the impacts of transport, particularly on energy use, air quality and climate change.</p> <p>The 1<sup>st</sup> part of the generic presentation done by the UNEP was adopted for the presentation. Additional slides were included to make it more appropriate for the Latin American and Caribbean audience. Slides about Asia are also included to build upon a broader context.</p> <p><b>Powerpoint Filename:</b> <i>Transport and the Environment.pptx</i></p>
10:30	<i>Sustainable Urban Transport: Focus on Cleaner Vehicles and Fuels</i>	<p>This section focuses on the importance of having cleaner vehicles within the context of sustainable urban transport (SUT).</p> <p>Other components of the SUT Framework are not discussed since these are not for the target audience of the workshop. Fleet managers would be interested, however, in cleaner vehicles (and fuels) and fuel savings.</p> <p><b>Powerpoint Filename:</b> <i>Cleaner, more efficient fuels and vehicles</i></p>
11:00	Coffee Break	
<b>Session 2: Presentation of the UNEP/TNT Toolkit for Clean Fleet Strategy Development</b>		
11:15	<i>Clean Fleet Management Toolkit Overview</i>	<p>The 2<sup>nd</sup> part of the generic presentation is adopted for this session.</p> <p><b>Powerpoint Filename:</b> <i>Clean Fleet Management Toolkit intro.pptx</i></p>
11:45	<i>Run-through of the Tools</i>	There would be a section on the actual run-through of the tools (other than Tool 18). The detailed contents will not be discussed during this session. The objective here is to familiarize the audience of the general flow of the website and the functionalities that are available. The detailed contents can be read outside of the workshop.
12:15	Tool 18	The tool shall be flashed and the trainer shall go through each component of the tool in detail.
13:00	Lunch	

<b>Session 3: Group Session- Learning to Use the Toolkit</b>		
14:00	<i>Practical Session A: Tool 18 Familiarization Exercise</i>	This exercise aims to let the participants familiarize themselves with Tool 18. A hypothetical fleet data shall be used for the exercise.  See the session's training design below.
15:15		A group discussion wherein the participants will share the results of the exercise and their comments on the experience shall be conducted.
15:45	Coffee Break	
<b>Session 4: Cleaner Fleet Management in Practice</b>		
16:00	Presentation of Case Studies on the Implementation of the Toolkit	<b>Powerpoint Filename:</b> <i>Case studies.pptx</i>
17:00	Closing of Day 1	The participants shall be reminded that their fleet data shall be needed in the next day of training

## Day 2

<i>Time</i>	<i>Main Component</i>	<i>Details and Remarks</i>
9:00	<b>Welcome / Recap</b>	
<b>Session 5: Application of the UNEP/TNT Toolkit for Clean Fleet Strategy Development</b>		
9:15	<i>Presentation of Selected Participating Fleet – Data and Plans</i>	Pre-assigned or volunteer fleet managers can present about their fleet and their plans towards achieving a cleaner fleet.
10:00	<i>Practical Session B: Actual Fleet Data Entry</i>	The session will focus on data entry to the toolkit. Hopefully, the participants brought with them their fleet's data.  See the sessions' training design below.
11:00	Coffee Break	
11:15	<i>Practical Session B: Actual Fleet Data Entry (continuation)</i>	A brief discussion of the experience of the participants regarding data input of their actual data will be conducted. What are the issues? How can they re-order their data so that it would be compatible with the requirements of the toolkit?
11:30	<i>Practical Session C: Choosing Actions and Developing Strategies</i>	The participants would be asked to look at the different strategies that are presented in the toolkit and assess which ones can be applicable for their fleet, considering the availability of technologies and their budget.  See the sessions' training design below.
13:00	Lunch	
14:00	<i>Practical Session C: Choosing Actions and Developing Strategies(continuation)</i>	The participants will be asked to create ppt slides (if possible) to present their results – fleet impacts, possible reduction objectives, actions and strategies
15:45	Coffee Break	
16:00	<i>Wrap up and Next Steps</i>	See the questions for the wrap-up session below.

## Practical Session A -Toolkit Familiarization Exercise

### Training Instructions

<b>Objective</b>	To help the participants get familiarized with Tool 18 of the Cleaner Fleet Management Toolkit by using a standard hypothetical set of fleet data.																																																																																	
<b>Duration / List of activities</b>	<p>The exercise shall follow the flow below:</p> <ol style="list-style-type: none"> <li>15 minutes shall be allotted for the briefing and Q&amp;A at the start of the session</li> <li>1 hour will be allotted for the hands-on activity where the participants shall enter the hypothetical fleet data into tool 18 and answer the exercise questions</li> <li>30 minutes shall be used for discussing the results and the experiences in inputting the data</li> </ol>																																																																																	
<b>Materials needed</b>	<ul style="list-style-type: none"> <li>Copy of the toolkit program (excel file)</li> <li>Copy (hardcopy or ppt slide) of the hypothetical fleet data</li> <li>Laptops/computers</li> </ul>																																																																																	
<b>Details of Activities</b>	<p><b>Briefing:</b></p> <p>General instructions (see below – hands-on activity) shall be given to the participants using ppt slides.</p> <p><b>Hands-on Activity:</b></p> <p>The activity shall use the following hypothetical fleet data:  A logistics company, ABC Logistics, wants to estimate its GHG and air pollutant emissions for the year 2008. The table below summarizes the data that was collected from its fleet managers:</p> <table border="1"> <thead> <tr> <th>Type of Vehicle</th> <th>Number of vehicles</th> <th>kms. travelled in 2008</th> <th>Liters consumed in 2008</th> </tr> </thead> <tbody> <tr> <td rowspan="4"><i>Passenger cars</i></td> <td><i>Pass.cars.Petrol Pre-Euro</i></td> <td>20</td> <td>400,000</td> <td>14,000</td> </tr> <tr> <td><i>Pass.cars.Petrol Euro-1 and Euro II</i></td> <td>3</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Pass.car diesel Pre-Euro</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Pass.car diesel Euro I and II</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td rowspan="3"><i>Light trucks</i></td> <td><i>Lighttrucks pre-Euro</i></td> <td>40</td> <td>1,600,000</td> <td>160,000</td> </tr> <tr> <td><i>Lighttrucks Euro I</i></td> <td>20</td> <td>800,000</td> <td>80,000</td> </tr> <tr> <td><i>Lighttrucks Euro II</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td rowspan="4"><i>Heavy trucks</i></td> <td><i>Lighttrucks Euro III and Above</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Heavy duty trucks pre Euro</i></td> <td>30</td> <td>1,500,000</td> <td>525,000</td> </tr> <tr> <td><i>Heavy duty trucks Euro I</i></td> <td>35</td> <td>1,750,000</td> <td>612,500</td> </tr> <tr> <td><i>Heavy duty trucks Euro II</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td rowspan="3"><i>Motorcycles</i></td> <td><i>Heavy duty trucks Euro III and Above</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Motorcycles 4-stroke</i></td> <td>25</td> <td></td> <td>3,750</td> </tr> <tr> <td><i>Motorcycles 2-stroke</i></td> <td>15</td> <td></td> <td>2,625</td> </tr> <tr> <td rowspan="4"><i>Buses</i></td> <td><i>Bus pre-Euro</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Bus Euro I</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Bus Euro II</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td><i>Bus Euro III and Above</i></td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>The participants shall be grouped based on the number of available workstations (or laptops).</p> <p>They shall be asked to transfer the data from the table above to the tool 18, leaving other things in the toolkit constant. This will enable them to answer the following questions:</p> <ol style="list-style-type: none"> <li>How much is the total CO2 and PM10 emissions of the fleet in 2008?</li> <li>Theoretically, how many premature deaths can be attributed to the total amount of PM10 emitted by the fleet in 2008?</li> <li>How many liters of fuel can the company save per year (maximum) if the company would implement eco-driving and better maintenance measures?</li> <li>How many trees would the company needs to plant to be able to offset half of its emissions?</li> <li>Which will save more emissions? <ol style="list-style-type: none"> <li>Using the current fleet and blending 10% biofuels in the fuel</li> <li>Changing the current gasoline passenger vehicles to diesel passenger vehicles</li> </ol> </li> </ol> <p>(Answers to follow)</p>	Type of Vehicle	Number of vehicles	kms. travelled in 2008	Liters consumed in 2008	<i>Passenger cars</i>	<i>Pass.cars.Petrol Pre-Euro</i>	20	400,000	14,000	<i>Pass.cars.Petrol Euro-1 and Euro II</i>	3	0	0	<i>Pass.car diesel Pre-Euro</i>	0	0	0	<i>Pass.car diesel Euro I and II</i>	0	0	0	<i>Light trucks</i>	<i>Lighttrucks pre-Euro</i>	40	1,600,000	160,000	<i>Lighttrucks Euro I</i>	20	800,000	80,000	<i>Lighttrucks Euro II</i>	0	0	0	<i>Heavy trucks</i>	<i>Lighttrucks Euro III and Above</i>	0	0	0	<i>Heavy duty trucks pre Euro</i>	30	1,500,000	525,000	<i>Heavy duty trucks Euro I</i>	35	1,750,000	612,500	<i>Heavy duty trucks Euro II</i>	0	0	0	<i>Motorcycles</i>	<i>Heavy duty trucks Euro III and Above</i>	0	0	0	<i>Motorcycles 4-stroke</i>	25		3,750	<i>Motorcycles 2-stroke</i>	15		2,625	<i>Buses</i>	<i>Bus pre-Euro</i>	0	0	0	<i>Bus Euro I</i>	0	0	0	<i>Bus Euro II</i>	0	0	0	<i>Bus Euro III and Above</i>	0	0	0
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**Discussion:**

After the hands-on exercise, the answers to the given questions shall be revealed one-by-one and shall be explained to the audience. A brief general discussion will follow.

The discussions shall center on the questions below:

1. Was this exercise able to help you understand the basic mechanics of how Tool 18 works?
2. Did you have any difficulty in inputting the data? If so, can you elaborate on the difficulty you have encountered?
3. How would you rate the user-friendliness of the tool? Do you have any suggestions at this time for improving the user-friendliness of the toolkit?
4. Other suggestions.

## Practical Session B –Actual Fleet Data Entry Exercise

### Training Instructions

<b>Objective</b>	To help the participants use Tool 18 in translating their data into the fleet’s impacts in terms of CO2, air pollution and the health of the citizens and to identify data compatibility issues in using the toolkit
<b>Duration / List of activities</b>	<p>The exercise shall follow the flow below:</p> <ol style="list-style-type: none"> <li>15 minutes shall be allotted for the briefing and Q&amp;A at the start of the session</li> <li>1 hour will be allotted for the hands-on activity where the participants shall enter their actual fleet data into tool 18</li> <li>30 minutes shall be used for discussing the results and the experiences in inputting the data</li> </ol>
<b>Materials needed</b>	<ul style="list-style-type: none"> <li>• Copy of the toolkit program (excel file)</li> <li>• Actual fleet data (which should be asked from the participants in advance) <i>Note: If there are participants which don’t have actual fleet data, a default set of fleet data shall be used (to be provided by CAI)</i></li> <li>• Laptops/computers</li> </ul>
<b>Details of Activities</b>	<p><b>Briefing:</b></p> <p>A general briefing shall be given. The participants are expected to successfully transfer their data into the toolkit. Tips (Things-to-remember) shall be given to the participants with regards to data input to the toolkit.</p> <p><b>Hands-on Activity:</b></p> <p>The participants shall be given roughly an hour to input their data. The participants shall be grouped if needed (due to lack of workstations or data). The trainer shall provide hands-on guidance to those who are having difficulties in transferring their data to the toolkit. Issues such as incompatible categorization, figure units and missing data are to be expected. Suggestions on how to organize the data shall be given to those who need them.</p> <p><b>Discussion:</b></p> <p>The discussion for this session would bring out the different experiences and issues encountered by the participants. The questions below shall be answered during this session:</p> <ol style="list-style-type: none"> <li>How did you find the experience of inputting actual data into the toolkit? Was it difficult or easy?</li> <li>If you found it difficult, what specific issue did you encounter?</li> <li>Is your fleet data organized in such a way that it is easy to transfer the data to the toolkit? What do you suggest to make data transfer easy?</li> <li>What were your impressions about the impacts of your fleet?</li> </ol>

## Practical Session C –Choosing Actions and Developing Strategies

### Training Instructions

<b>Objective</b>	To help the participants use Tool 18 in choosing actions and developing strategies for their fleets towards moving to reduced climate change and air pollution impacts.
<b>Duration / List of activities</b>	<p>The exercise shall follow the flow below:</p> <ol style="list-style-type: none"> <li>a. 15 minutes shall be allotted for the briefing and Q&amp;A at the start of the session</li> <li>b. 1 hour and 40 minutes will be allotted for the participants to evaluate their options and come up with a presentation for their chosen targets, actions and strategies</li> <li>c. 1 hour will be allotted for the presentations of the participants</li> <li>d. 30 minutes will be allotted for discussions (can be done after each presentation)</li> </ol>
<b>Materials needed</b>	<ul style="list-style-type: none"> <li>• Copy of the toolkit program (excel file) with encoded fleet data</li> <li>• Laptops/computers</li> </ul>
<b>Details of Activities</b>	<p><b>Briefing:</b></p> <p>A brief recap of the options shall be conducted to refresh the audience’s minds regarding these</p> <p><b>Choosing of Actions and Strategies:</b></p> <p>The participants shall be asked to evaluate the options that are given in the toolkit and come up with a presentation about their own fleet’s possible actions and strategies. The outline of the presentation shall be:</p> <ol style="list-style-type: none"> <li>a) Brief Introduction of the Fleet <ul style="list-style-type: none"> <li>• Company/ institution name</li> <li>• Main business/ activity</li> <li>• Fleet details (number of vehicles, interesting notes about the composition of the fleet, etc...)</li> </ul> </li> <li>b) Impacts <ul style="list-style-type: none"> <li>• Environmental and health impacts of the fleet (from toolkit)</li> </ul> </li> <li>c) Possible reduction targets for the fleet <ul style="list-style-type: none"> <li>• What level (%) of reduction can be set for our fleet? (This can be evaluated using the results of the fleet management toolkit)</li> </ul> </li> <li>d) Possible actions <ul style="list-style-type: none"> <li>• Which actions provided by the toolkit can be adopted by my fleet? Which ones will we possibly choose and why?</li> <li>• Which options are not in the toolkit which my fleet can use?</li> </ul> </li> <li>e) Possible strategies <ul style="list-style-type: none"> <li>• What strategies can we do to implement the actions that were chosen? (e.g. drivers’ incentives to be implemented if eco-driving is to be sustained; creating a trip management system; creating a daily inspection system for vehicles; inclusion of eco-driving test in drivers’ test, etc...)</li> </ul> </li> <li>f) Foreseen challenges <ul style="list-style-type: none"> <li>• What challenges can you foresee in implementing a cleaner fleet program?</li> </ul> </li> <li>g) Next steps for the company</li> </ol> <p>Each presenter shall be given around 5 to 10 minutes to present (depending on the number of presenters).</p> <p><b>Discussion:</b></p> <p>The discussion will consist of Q&amp;A for each presenter. This can be done right after each presentation or after all presentations have been delivered.</p>

## Wrap Up and Next Steps

### Training Instructions

<b>Objective</b>	To synthesize the whole workshop and to provide an avenue to build stronger relations between the fleets after the training and get feedback for improvement with regards to the toolkit.
<b>Duration / List of activities</b>	An hour shall be allotted for this activity
<b>Materials needed</b>	<ul style="list-style-type: none"><li>• Metacards</li></ul>
<b>Details of Activities</b>	<p>Participants shall be asked to give their comments on the following using metacards:</p> <ul style="list-style-type: none"><li>a) How do they find the toolkit? What do they find most useful in it?</li><li>b) How can it be improved?</li><li>c) How do they plan to move forward? Are they going to use the toolkit in implementing a cleaner fleet program?</li><li>d) Is there a value in building cooperation between the different participants in implementing a cleaner fleet program?</li></ul> <p>The activities and discussions shall be synthesized.</p>