

UNITED NATIONS
Economic and Social Commission for Asia and the Pacific

**Report of the Regional Capacity Building Workshop on
Measurement of Inland Transport CO₂ Emissions and Mitigation Policies**

26-27 September 2013
Conference Room 4 UNCC, Bangkok

CONTENTS

	<i>Page</i>
I. INTRODUCTION	1
A. Background and Organization of Meeting.....	1
B. Attendance	1
C. Opening of the Meeting.....	2
II. SUMMARY OF DISCUSSION	2

ANNEXES

Annex I: Programme	8
Annex II: List of participants	11

I. INTRODUCTION

A. Background and Organization of Meeting

1. The Rio+20 Summit renewed the global commitments to sustainable development and recognized that transport and mobility are central to sustainable development. In order to fulfill these commitments Asian countries and cities will need to consider adopting and implementing various innovative policies, strategies and approaches to ensure economic, environmental and social sustainability of transportation systems.
2. To assist Governments to evaluate policy options and enable them to make the best policy decisions and optimize their strategy and actions for CO2 reduction targets, a well-defined standard monitoring and assessment tool is essential.
3. UNESCAP and UNECE along with other regional commissions is implementing a project entitled “Development and implementation of a monitoring and assessment tool for CO2 emissions in inland transport to facilitate climate change mitigation” funded by the United Nations Development Account designed to assist member States in the area of emissions measurement and mitigation policies.
4. Under the project, a global status report on inland transport CO2 emissions was prepared and an inland transport emission measurement model named For Future Inland Transport Systems (ForFITS) is developed. It is hoped that the model can be a useful planning tool for sustainable transport policies.
5. This Regional Capacity Building Workshop on Measurement of Inland Transport CO2 Emissions and Mitigation Policies is part of our ongoing efforts to raise awareness about the need for emissions measurement, effective mitigation policies and the use of the ForFITS model.
6. The programme of the Meeting is contained in Annex I to the report.

B. Attendance

7. The workshop was attended by participants from the following ESCAP member States: Azerbaijan, Bangladesh, Bhutan, Cambodia, China, Fiji, Georgia, Indonesia, Iran (Islamic Republic of), Kazakhstan, Kyrgyzstan, Lao People’s Democratic Republic, Malaysia, Maldives, Mongolia, Nepal, Pakistan, Russian Federation, Sri Lanka, Samoa, Tajikistan, Thailand, Turkey, Uzbekistan and Viet Nam.
8. Representatives of the United Nations Economic Commission for Europe, Asian Development Bank GMS Program, Clean Air Asia, German Technical Cooperation Thailand, International Council on Clean Transportation, Institution for Transport Policy Studies, Sultan Azlan Shah Polytechnic, University Malaysia Terengganu, Impact Global Emission Solutions Ltd., Korea Maritime Institute, and Korea Transport Institute attended the workshop
9. The list of participants is attached as Annex II to this report.

C. Opening of the Meeting

10. The workshop was opened by Mr. Dong-Woo Ha, Director, Transport Division and Ms. Martine-Sophie Fouvez, Regional Advisor, ECE.

II. SUMMARY OF WORKSHOP

Session I: State of emissions in Asia and mitigation policies

11. Workshop participants noted that the growing vehicle fleet and associated increase in fuel consumption and emissions from motorized transport in the world, as well as in Asia, is a major contributor to those greenhouse gas emissions that adversely affect climate change. In Asia-Pacific, the total transport produced CO₂ emissions soared from 1056 million tonnes in 1990 to 1844 million tonnes in 2010. In order to reduce those harmful emissions, there is an urgent need for countries to adopt measures to mitigate transport emissions, especially CO₂.

12. Various mitigation policy options for reducing transport emissions were introduced at the workshop including integrated transport and urban transport planning, improvement of public transportation, promotion of non-motorized transport, travel demand management, modal shift to energy efficient modes. Based on the country reports, Bhutan, Georgia, Indonesia, Nepal, Sri Lanka, Tajikistan, Thailand and Viet Nam were implementing some of these policies.

13. The session also introduced the ForFITS model which was the forward looking tool modelling transport, energy and CO₂ emissions. The model allowed the estimation of emissions and to understand policy impacts (NAMAs, etc). It was suitable for the analysis at national level and at large metropolitan level. Workshop participants noted that this workshop linked to a technical national workshop, held on 23 and 24 September 2013 in Bangkok and to several other awareness-raising and capacity-building events, held in all other UN regions (Africa, Europe, Latin America and the Caribbean, and West Asia).

Session II: International experiences on emission measurement and mitigation policies

14. This session covered experiences on emission measurement and mitigation policies of international and national organizations, academic institution and private company including Asian Development Bank (ADB-GMS), International Council on Clean Transportation (ICCT), Institute for Transport Policy Studies, Clean Air Asia (CAA), German Technical Cooperation (GIZ), University Malaysia Terengganu, and Impact Global Emission Solutions (IGES).

15. The session discussed GMS, ASEAN, Asia (including China, India, Indonesia, Japan and Malaysia), Europe and North America's transport emission status, issues, experiences and best practices in measuring and reducing CO₂ emission from road transport. Global Transportation Road Map Model, Vision-Backcasting approach to propose long term transport policies, Carbon Neural corridor project, Electro-Catalytic Combustion Assist solution were introduced.

16. Other policy measures/options introduced during the session included the implementation of vehicle performance standards, carbon-differentiated fiscal measures for vehicles and fuels, fuel-saving strategies for freight carriers, green freight and green logistics program, maintenance improvement, driver training.

17. The session also highlighted that that data was one of the major barriers in measuring transport emission in Asia and pinpointed that commercial benefits can be obtained from implementing a sustainable transport policies and measures.

Session III: Country experiences on emission measurement and mitigation policies

18. Selected country experiences on emission measurement and mitigation policies were presented at the workshop. These included the presentation from Bhutan, China, Indonesia, Lao PDR, Nepal, Pakistan, Samoa, Sri Lanka, Thailand, Turkey, Viet Nam and Korea Maritime Institute.

19. A number of important issues related to land transport emission and potential and planned measurements and mitigation policies were presented and discussed. Of these, the following key issues were considered important:

Issues at national level included

- a. Rapid urbanization and increase in motorization (including high percentage share of motorcycle in some countries' fleet compositions) contributed to the increased emissions and pollutions
- b. Emission data collection and management system were poor in most developing countries.
- c. Resources allocated specifically for emission mitigations were often lacked and were heavily reliance on foreign assistance.
- d. Poor vehicle maintenance system

The following measurements and policies were planned or being implemented.

- a. Development of sustainable transport master plan.
- b. Development and establishment of comprehensive and integrated transport and logistics system
- c. Promotion of the use and the expansion of energy-efficient and low-carbon mode of transports e.g. expansion of railways, provide safe and secured environment for non-motorized transport.
- d. Improving public transport
- e. Use of alternative fuel/energy
- f. Use of low carbon vehicles
- g. Road speed enforcement to minimize fuel consumption
- h. Enforcing vehicle, vehicle emission testing, road design and fuel standards
- i. Use of technology innovation to support energy efficiency and emission reduction
- j. Implementation of fiscal policies (e.g. tax incentives) to encourage energy efficiency in land transport
- k. Private section participation in emission mitigation
- l. Education and Public awareness and participation program
- m. Facilitating legal and institutional framework

Session IV: ForFITS Model and way forward

20. ECE experts provided general overview of a monitoring and assessment tool “For Future Inland Transport Systems (ForFITS)”. The ForFITS model was a software tool which was freely available for users and allowed the estimation and assessment of emissions in transport. It also allowed evaluation of transport policies for CO₂ emission mitigation by converting information on transport activity into fuel consumption and CO₂ emission. The model also took into account demographic and socio-economic contexts and their influences.

21. Workshop participants were informed of the national capacity and awareness raising workshop on ForFITS which was held in Bangkok on 23-24 September. The national workshop was jointly organized by ESCAP and Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport, Thailand. The national workshop was part of the project’s activity on piloting out the ForFITS model in Asia and the Pacific region. ESCAP welcomed countries who may be interested in implementing ForFITS model to approach the secretariat for further arrangement. Fiji, Iran, Republic of Korea and Viet Nam had expressed their interests.



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Tentative programme

Thursday, 26 September 2013

08:30-9:00	Registration
09:00-10:15	<p>Opening</p> <p>1. Opening of the Workshop</p> <p style="padding-left: 20px;">(a) Opening addresses by Mr. Dong-Woo Ha, Director, Transport Division</p> <p style="padding-left: 20px;">(b) Opening remarks and introduction to the UNDA project by Ms. Martine-Sophie Fouvez, Regional Advisor, ECE</p> <p>Session I: State of emissions in Asia and mitigation policies</p> <p>2. Overview of state of transport emissions in Asia (Thanattaporn Rasamit, ESCAP)</p> <p>3. Policy options for reducing transport emissions (Madan B. Regmi, ESCAP)</p> <p>4. Introduction to the ForFITS Model (Pierpaolo Cazzola, ECE)</p> <p>Discussion</p>
10:15-10:30	Coffee Break
10:30-12:00	<p>Session II: International experiences on emission measurement and mitigation policies</p> <p>5. Transport emission measurement practices and mitigation policy options: international organizations perspective</p> <p style="padding-left: 20px;">(a) Best Practices in Reducing CO₂ from Road Transport, Mr. Joshua Miller, International Council on Clean Transportation (ICCT)</p> <p style="padding-left: 20px;">(b) Low Emission Transport Action Plan for ASEAN, Mr. Masanori Gennai, Director, Institution for Transport Policy Studies (ITPS)</p> <p style="padding-left: 20px;">(c) Experiences in Measuring Transport CO₂ Emissions in Asia Mr. Sudhir Gota, Technical Manager (Transportation), Clean Air Asia (CAA)</p> <p>Discussion</p>
12:00-13:30	Lunch break
13:30-15:00	Session II: Emission measurement and mitigation policies (contd.)

(d) Green freight: reducing emissions from GMS transport corridors, **Ms. Naeeda Crishna-Morgado, Carbon Footprint Specialist**, GMS Environment Operations Center, Asian Development Bank (ADB),

(e) **Mr. Stefan Bakker, Team Leader, German Technical Cooperation (GIZ) Thailand**

(f) A Review of Carbon Dioxide (CO₂) in Malaysia: Current status and Challenges, **Dr. Noor Zaitun Yahaya, Lecturer**, University Malaysia Terengganu,

(h) Silver Bullet on Transport Emission Reductions-European experiences, **Geerard Collijs, Impact Global Emission Solutions, Brussels**

Discussion

15:00-15:15

Coffee Break

15:15-17:00

Session III: Country experiences on emission measurement and mitigation policies
Selected country experiences: Bhutan, China, Indonesia, Lao PDR, Nepal, Pakistan, Samoa, Sri Lanka, Thailand, Turkey, Viet Nam and Korea Maritime Institute

Discussion

17:30- 19:30

Reception

Friday, 27 September 2013

09:00-10:30

Session III: Country experiences (contd.)

Discussion

10:30-10:45

Coffee Break

10:45-12:00

Session III: Country experiences (contd.)

Discussion

12:00-13:30

Lunch break

13:30-15:00

Session IV: ForFITS Model

7. For Future Inland Transport Systems (ForFITS) emission measurement model. its

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_6664

