









# Sustainable Freight Transport and Logistics in the Mekong Region



## Sustainable Freight Transport and Logistics in the Mekong Region



## **Context and challenges**

- Important driver of the economy in the GMS.
- Trucking accounts for 70-80% of the sector.
- Efficiency, safety and environmental issues.
- Aged, fuel-inefficient truck fleets.
- Inadequate logistics management capacity.
- Lack of data and standards.
- Need of sound road and fleet investments.
- Need of policy support and incentives.
- Solutions exist but are not adopted in wider scale.





#### **Areas of activities**

- Fuel efficiency
- Safe dangerous goods transport
- Access to finance
- Policy and consumer awareness



#### Partners, financiers, timeframe, budget

- Business associations, transport ministries, financial institutes and 513 SMEs in 5 countries.
- GIZ, GMS-FRETA and Mekong Institute, ADB, international companies.
- 36 months, 1 February 2016 31 January 2019
- 2.4 million Euro, 90% EU contribution and 10% German Government and others.

## **Overall Achievements in the Region...**









## **Fuel Efficiency**

- 58 local trainers trained on eco driving.
- Curriculum translated into 5 languages.
- 513 SMEs trained on eco and defensive driving covering more than 600 drivers.
- 16.38% fuel reduction in the overall average (10-28% in range).
- 169.81 gCO<sub>2</sub>e/km. CO<sub>2</sub> emission reduction in average.
- Eco driving integrated into truck driving training in Myanmar and Cambodia.



#### **Access to Finance**

15 SMEs are in the process of business plan development.



## **Safe Dangerous Goods Transport**

- ADR 2017 translated into 4 languages (Cambodia, Myanmar and Vietnam and Laos)
- 22 trainers from 5 countries trained on DGT.
- 91 government officers from 4 countries and 108 SMEs were trained.
- 6 notifications in MM issued, Decree in VN and KH are being revised.
- Action plan for DGSA establishment in Thailand is approved.



# **Policy and Consumer Awareness**

- 13 SMEs in the process of GFA certification.
- 86 SMEs in Thailand in the process of Q Mark certification.
- Standard guideline on Green Freight for Vietnam developed and approved by DRVN.
- NDC action plan for freight sector for Thailand.

## **Fuel Efficiency Improvement by Country**

#### **HEAVY DUTY - LOADED TRUCK**

FUEL CO<sub>2</sub>

	Average Fuel Consumption		Fuel Saving			CO <sub>2</sub> Emission		CO <sub>2</sub> Emission Reduction	
Country	Pre-training	Post-training	Fuel Sa	aving	Country	Pre-training	Post-training	CO <sub>2</sub> Emission F	Reduction
	(L/100 km)	(L/100 km)	(L/100 km)	(%)		(gCO <sub>2e</sub> /km)	(gCO <sub>2e</sub> /km)	(gCO <sub>2e</sub> /km)	(%)
CAMBODIA	42.35	35.25	7.10	16.76	CAMBODIA	1,162.36	967.50	194.87	16.76
LAOS	49.17	35.31	13.86	28.18	LAOS	1,349.51	969.21	380.30	28.18
MYANMAR	51.08	44.32	6.77	13.25	MYANMAR	1,402.02	1,216.31	185.71	13.25
THAILAND	34.70	30.22	4.48	12.90	THAILAND	952.31	829.44	122.87	12.90
VIETNAM	42.11	37.31	4.80	11.41	VIETNAM	1,155.74	1,023.91	131.83	11.41
AVERAGE	43.88	36.48	7.40	16.86	AVERAGE	1204.39	1001.27	203.12	16.86

#### **HEAVY DUTY - EMPTY TRUCK**

FUEL CO<sub>2</sub>

Country		Average Fuel	Consumption	Fuel Sa	ovina.		CO <sub>2</sub> Emission		CO <sub>2</sub> Emission Reduction	
	Pre-training	Post-training	ruei Sa	avirig	Country	Pre-training	Post-training			
		(L/100 km)	(L/100 km)	(L/100 km)	(%)		(gCO <sub>2e</sub> /km)	(gCO <sub>2e</sub> /km)	(gCO <sub>2e</sub> /km)	(%)
	CAMBODIA	29.23	22.21	7.02	24.03	CAMBODIA	802.31	609.50	192.81	24.03
	LAOS	NA	NA	NA	NA	LAOS	NA	NA	NA	NA
	MYANMAR	39.27	32.61	6.66	16.95	MYANMAR	1,077.77	895.09	182.68	16.95
	THAILAND	26.28	23.61	2.67	10.16	THAILAND	721.37	648.09	73.28	10.16
	VIETNAM	30.33	26.79	3.54	11.68	VIETNAM	832.47	735.24	97.23	11.68
er:	AVERAGE	31.28	26.31	4.97	15.90	AVERAGE	858.48	721.98	136.50	15.90

### **Lessons Learned and Success Factors**

Strong cooperation with public and private partners

Show cases of verified benefits

Policy / high-ranking support

**Support by company owners** 

High degree of localization and adaptation

Resulted based management methods

Strong network with Int' Companies e.g. SCG, DHL, Heineken