Since Nippon Express opened its first overseas representative office in New York in 1958, the company’s global network has spread to over 402 locations in 38 countries with 16,455 personnel supporting our customers’ daily business processes. (As of March 31, 2012. Japan is not included.)

- **Europe, Middle East, Africa**: 2,278 Employees, 16 companies, 2 offices, 68 locations
- **South & Southeast Asia, Oceania**: 6,431 Employees, 20 companies, 3 offices, 110 locations
- **The Americas**: 2,362 Employees, 14 companies, 118 locations

Until now, the Nippon Express Group had developed its own safety and health policy based primarily on the Occupational Health and Safety Law. After a thorough review of the existing system, in April 2010, we implemented the new Nippon Express Safety and Health Management System (NSM), featuring enhanced and reinforced initiatives based on the ISO standards. All employees of the Nippon Express Group shall continue to work together as a team to significantly reduce traffic and labour accidents in the workplace and ensure occupational hazard-free environment for everyone.
In the IZU Training Centre (Japan), Nippon Express provides safety and operational training to its employees and assists them in acquiring fundamental driving and vehicle maintenance skills.

Outline of a facility

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site area</td>
<td>98,324㎡</td>
</tr>
<tr>
<td>Building Area</td>
<td>6,396㎡</td>
</tr>
<tr>
<td>Total floor area</td>
<td>13,104㎡</td>
</tr>
</tbody>
</table>

Training Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver training course</td>
<td>Area</td>
</tr>
<tr>
<td></td>
<td>Circumference</td>
</tr>
<tr>
<td>For training units</td>
<td>Truck</td>
</tr>
<tr>
<td></td>
<td>Forklift</td>
</tr>
</tbody>
</table>

Accommodation

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total floor area</td>
<td>10,675㎡</td>
</tr>
<tr>
<td>Number of guests</td>
<td>174</td>
</tr>
</tbody>
</table>

**Eco-Driving Education**

“Eco-driving” has two meanings: ecological driving and economical driving. Eco-driving, or driving in an eco-friendly manner, aims to protect the environment, while reducing fuel consumption and operational costs. Furthermore, it enhances greater safety through moderate and responsible driving.
Fuel Economy Improvement

In Japan, Nippon Express Group have already installed digital tachograph systems in all of our motor cargo vehicles (more than 17,500 units). Since then, we have been making consistent improvement in fuel efficiency.

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Decreasing Accidents

In addition, we gradually reduced the number of traffic accidents. In 2010, Nippon Express Co., Ltd. achieved zero accident level in Japan.
Our Challenge in Asia

Usually, local drivers pay little attention to the newly introduced technologies and measures. However, once they witness the instructor’s eco-driving technique, they easily comprehend the concept of the digital tachograph system and their driving performance significantly improves.

We are now estimating that the potential for fuel efficiency improvement is approximately -7%.

Nippon Express Group in Malaysia

- Nippon Express (Malaysia) Sdn. Bhd. (NEM) was established in 1984.
- NEM is one of the market leaders in the freight forwarding and logistics industries in Malaysia.
- NEM maintains a comprehensive network encompassing approximately 1,200 employees in eight branch offices, ten warehouses and a subsidiary company.
- The core business activities of NEM include international freight forwarding and logistics services incorporating airfreight, ocean freight, warehousing and distribution, overseas removal services, as well as value added logistics design and services.
- NEM’s subsidiary Nittsu Transport Service (M) Sdn. Bhd. specializes in land transportation, precisely and efficiently transporting cargo within Peninsular Malaysia, north into Thailand and south into Singapore.
**Introduction of Our CDM Project**

• **Project Objective**  
  – Improvement of transportation efficiency in diesel-fired freight transportation fleet through the use of digital tachograph systems in a fleet of 45 freight trucks.

• **Project Participants**  
  – Nippon Express (Malaysia) Sdn. Bhd.
  – Nippon Express Co., Ltd.
  – Nittsu Research and Consulting, Inc.

• **CDM Consultant**  
  – Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.

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**Digital Tachograph System**

The proposed digital tachograph system is developed and manufactured by Fujitsu and Transtron. The digital tachograph system consists of an on-board terminal (MTR-G, below) and a data transmission, collection and processing system.

The proposed system targets efficient and safe driver behavior (in Japanese “Kaizen”), fuel saving and CO₂ emission reductions.
The onboard terminal and other devices will be installed in each truck. No change or modification of engine and other original drive control systems will take place.
**CDM Aspects of the Project I**

- **Methodology**: AMS-III.AT “Transportation energy efficiency activities installing digital tachograph systems or similar devices to transport fleets”, Version 02

- **Baseline**: Continuation of the current practice, i.e. inefficient driving patterns

- **Additionality**: First-of-its-kind referred to “Guidelines on Additionality of First-Of-Its-Kind Project Activities”

- **Expected emission reductions**: 239 tCO₂/yr  
  (Ave. 5.3 tCO₂/yr/vehicle)

**Contribution to Sustainable Development**

- **Social**
  Additional social benefits through improving the quality of health conditions of the local communities residing along the traceable routes covered by the Project through a decrease in the level of particulate and other emissions associated with the decreased consumption of reduced amounts of fossil fuel.

- **Economic**
  More efficient use of fossil fuels through the use of the digital tachograph system. Pioneering example in the area of transport and will assist the transfer from Japan of environmentally sound state-of-the-art technology. Improvement of the competitiveness of freight transport industry in Malaysia and adding economic development benefits.

- **Environmental**
  Reduction of fossil fuel consumption in freight transport as a result of efficient driving. Reduced GHG, NOx and particulates emissions and improvement of air quality in Malaysia.
Hard Issues on Our Project

• Capturing data of “ton-kilometer”
  – Necessary to capture each weight & distance of cargo.
  – Trucking companies do not grasp weight data usually.
  – We asked our consignors to provide these data, and accumulated them.
  – We could not help to exclude some vehicles from the project since impossible to grasp these data.

• Proving “first-of-its-kind” additionality
  – Difficult to prove “nothing”.
    • All of concerned people in Malaysia do not know the technology.
      But, nothing can be an evidence of it.
    – If economic additionality would not be proved in IRR, initial investment may be a barrier for trucking companies.
      • Most of them are small sized firm in every countries.

Potential in the future

• If our project would diffuse to non-Annex I countries…
  – 115 million trucks & buses in the countries
  – CO₂ reduction: 1t / yr / vehicle (conservative expectation)
• 115 million tCO₂ can be reduced per a year!
  – It corresponds…
    • 174% of CO₂ CERs issued in 2010
    • 87% of all CERs issued in 2010
    • 72% of CO₂ CERs issued in 2011
    • 36% of all CERs issued in 2011
Thank you!

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