Deutsche Investitions-und Entwicklungsgesellschaft (DEG)

KFW DEG

DEG, a member of the KfW Bankengruppe (KfW banking group), finances investments of private companies in developing and transition countries. As one of Europe's largest development finance institutions, it promotes private business structures to contribute to sustainable economic growth and improved living conditions.

DB Schenker



DB Schenker stands for the transportation and logistics activities of Deutsche Bahn. Over the years DB Schenker have gradually emerged into a multi-modal freight forwarding and logistics company offering land, air, and ocean freight transport services. The company also offer specialized logistics services for trade fairs, relocations, projects and global sports events. It provides innovative and cost efficient integrated transportation and logistics solutions through professional and dedicated employees to deliver superior value to customers.

TÜV NORD Ching



TÜV NORD China is a part of TÜV NORD Group, which is one of the largest technical service providers in Germany. TÜV NORD is one of the leaders in Environment protection, UNFCCC Clean Development Mechanism, energy efficiency management. The laboratories are certified by the Central Authority of the States for Safety Technology (ZLS) and the highlyqualified team is composed of experienced specialists for all areas of product, system and emission certification.



Asia Society for Social Improvement and Sustainable Transformation (ASSIST)

ASSIST is a non-stock, non-profit international capacity building organization with its headquarters in the Philippines. It aims to achieve and witness meaningful change to and for our planet and the people living on it. Since 2003, ASSIST has implemented over 30 projects funded by multi-lateral donors such as European Union, USAID, UNEP, UNIDO, DEG, GIZ, etc.

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IMPLEMENTING PARTNERS









PROJECT BRIEF

The shift to a greater environment friendly construction sector is a must to satisfy and meet the standards set by international bodies or green building design standards like LEED (Leadership in Energy and Environmental Design), BREEAM (BRE Environmental Assessment Method) and DGNB (Deutsche Gesell-schaftfürNachhaltigesBauen) among others. A number of organizations in the developed nations have adopted standards set by these bodies to upgrade their infrastructures, inventories and warehouses and comply with the latest environmental ethics and practices.

The green building standards provide excellent benchmarks for integrating concepts that enable environment friendly and sustainable construction as well as building operations. However, these standards can only be applied or adopted by developed nations as they have the capacity and the potential to build technically sound buildings in compliance with high standards with environment benefits. Today, non-availability of resources, financial constraints, technical limitations and lack of awareness among the developing nations make it difficult for the organizations to adopt and sustain high standards set by international bodies.

In this PPP Project co-funded by DEG and jointly implemented by DB Schenker China, TÜV NORD and ASSIST, the goal is to help the existing huge warehouses to adopt feasible eco-friendly practices in accordance with the green building design standards. The guidelines are to include life cycle assessment (LCA) for the buildings to bring into view a broader outlook on environmental, social and economic concerns. It will also assess all through the life cycle of buildings from extraction of raw materials to demolition and recycling and disposal of the waste.

METHODOLOGY

DELIVERY 1 Promotion and Launching

> **DELIVERY 2** Survey & Analysis

DELIVERY 3 Green Design Guidelines

DELIVERY 4 Green Implementation & Assistance

> **DELIVERY 5** Best Practices Sharing

	ECO PROMOTION	ECO brochures and othe on the project and to ed
	ECO LAUNCHING	The project launch will fu stakeholders about the p
	WAREHOUSE SURVEY & SITUATION ANALYSIS	An ECO questionnaire w stakeholders with huge v Based on responses, five detailed situation analysi
1	ECO DESIGN GUIDELINES	ECO subject matter expe to come up with a Green or DGNB standards.
	ECO DESIGN GUIDELINES IMPLEMENTATION	The 5 selected warehous guidelines to help them operations, structure and
	ECO TRAINING	4 ECO trainings shall be staff on the guidelines ar while performing daily w
	ISO 14001 CERTIFICATION AUDIT	The 5 warehouses shall b certification. The improve set and this will help mea guidelines.
	ECO LEARNING KIT	The ECO learning kit sha 100 participants. It will co environmental, health an beneficiaries.
	ECO BEST PRACTICES	The event shall conclude stakeholders share their duration.
	ECO CASE STUDY	A case study of the 5 sele used as a future referenc

BENEFITS

ECO will initiate green building design and practices for a more sustainable warehouse facility through this PPP. At the end of the project, the stakeholders will be able to achieve the following:

- Knowledge on green building concepts and sustainable practices in building, maintaining and operating warehouse facilities.
- Act as multiplier effect in applying green and sustainable practices.
- ▶ Influence other warehouse facilities or industries to apply green and sustainable concepts from post-operational to pre-operational phase of warehouses and buildings.
- Contribute to China's aim in reducing greenhouse gas emissions and create a safer and healthier place for its population.

PROJECT ACTIVITIES

er IEC materials will be developed to raise interest ucate the stakeholders on eco-building concepts.

urther promote ECO and will also englighten the project and its activities.

vill be developed and circulated to at least 30 warehouses asking about basic information. warehouses shall be selected to execute a more

erts and professionals shall be brought together Design Guideline benchmarking LEED, BREEAM

ses will be provided ECO assistance on green adopt and transform current practices on d management of their warehouses.

facilitated to train and educate the warehouse nd other environmental aspects which are required arehouse operations.

be subject to external audit for ISO 14001 ements will be measured using the indicators asure the effectiveness and efficiency of the

all be developed and distributed to at least ontain the Green Design Guidelines and best nd safety practices to educate the project

project ECO and also enable participants and ECO learning and experiences during the project

ected warehouses will be developed which can be e for the stakeholders.