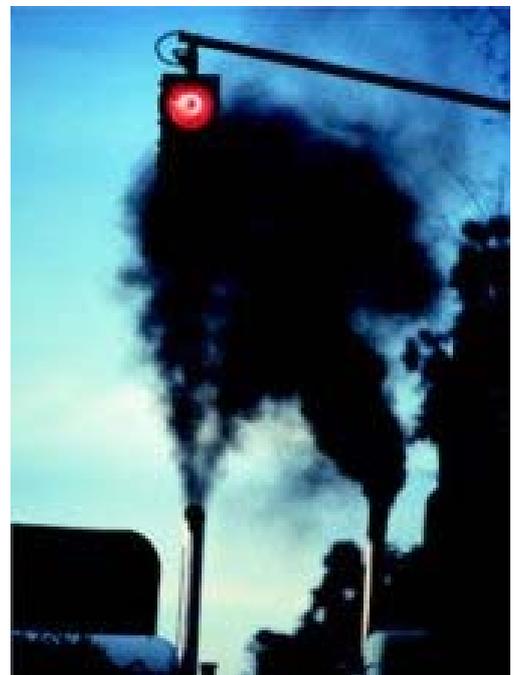
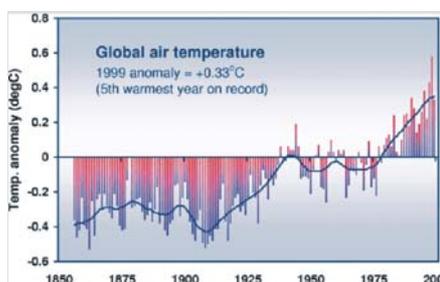


***CDM***  
***Training Concept***  
***by INTEGRATION***



## Global climate Change: The Facts

- **Greenhouse gas emissions will lead to global warming**
- **Governments and companies are committed to reducing greenhouse gases**
- **Certified emissions reductions will lead to emissions trading**
- **INTEGRATION offers professional solutions for participants in emissions trading world-wide**



When the United Nations Framework Convention on Climate Change (UNFCCC) was signed 1992 at the end of the Rio Conference on Environment and Sustainability, nearly every country accepted that global climate change was underway as a result of Greenhouse Gas (GHG) emissions. About 180 countries have joined the UNFCCC so far. Article 2 of the UNFCCC clearly states its aim, namely: *“to achieve ... stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”*

At the third conference of the parties (COP 3) at Kyoto in 1997 a number of industrialised countries decided to reduce their GHG emissions. Quantified emissions limitations and reduction objectives (QELROs) were allocated to each of the signatory countries, which are listed in Annex B of the Kyoto Protocol. The overall goal was to reduce GHG Emissions in the signatory countries to about 5% below 1990 levels. The first compliance period will run from 2008 to 2012.

The **Clean Development Mechanism** (CDM) is one of the three so called ‘Kyoto-Mechanisms’ of the Kyoto Protocol. These mechanisms were designed to help the Annex B Countries to meet a (not yet quantified) portion of their QELROs outside their national boundaries. The CDM allows Annex B Countries to finance projects in developing countries. The emissions reductions which occur during the certification period of a project will be credited to the investor as Certified Emission Reductions (CER). The advantages for the host country will come in the form of capacity building, the technology transfer and last but not least the financing of modern technology measures.

## INTEGRATION - General Approach

The impacts of industry and technology on our environment are most complex and, therefore, cannot be defined in terms of simple cause-effect relationships. To understand such problems and to consequently elaborate effective measures that protect and/or rehabilitate the environment demands a close cross-sectoral cooperation of excellent professionals and a multidisciplinary integrated approach.

According to our understanding, environmental protection and its acceptance within a society is always strongly related to its technical, economical, and social feasibility:

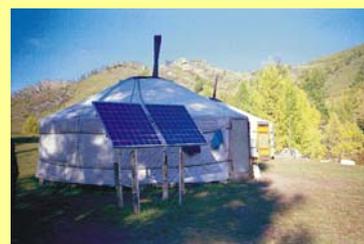
- Governmental actions with regard to enforcing laws and regulations will always consider the capability of the respective industry and the grade of acceptance by society.
- Industries will consider clean technologies and measures for minimising, or the treatment of, emissions only if they can retain their competitiveness or even achieve market advantages.
- The public will adopt lessons learnt and accept measures, provided they are promoted in a right way and are affordable.

## CDM Capacity Building:

### What INTEGRATION can offer

#### CDM Human Resource Development

- CDM Training Courses
- Training of Trainers
- Study Tours and Site Visits
- On the job training through the design and development of CDM Pilot Projects



*Example of an eligible CDM-Project:  
Solar Panels used in a Mongolian household*

## CDM Training - Targets

In addition to addressing the global problem of climate change in a cost-effective manner, CDM offers significant benefits to both the investing and the host parties. Benefits to the host parties include financial and technological inputs, capacity-building, local environmental benefits and indirect benefits such as employment generation and international contacts.

### Target Groups

- Industrial sector
- Consulting companies
- Financial enterprises
- Host country governments

### Training Content

Preparation of the CDM host country stakeholders for the upcoming international Emission Trading Regime of the Kyoto Protocol.

### Problems to be addressed

- Lack of climate change awareness in the public and the private sector
- Lack of linkages to the international accreditation system
- Lack of ability to identify, design and implement CDM projects

## Each stakeholder has to be trained for the ability to answer the following questions:

### "What is the CDM about?"

1. History of climate change negotiations
2. The Kyoto Protocol
3. Basis of the CDM
4. CDM Project activities

### "What is an eligible CDM project?"

5. Eligible Types of CDM-Project
6. Small Scale CDM-Projects
7. Baseline determination

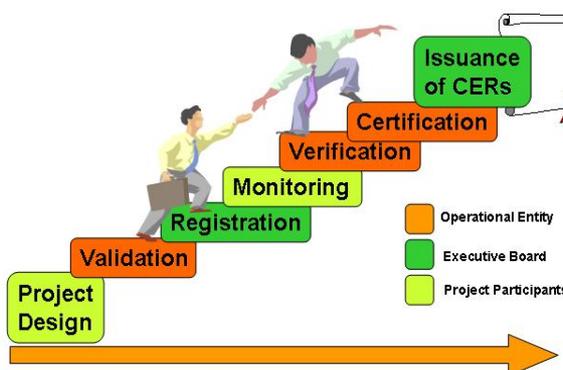
### "What is its significance for my country?"

8. CDM-Design Models
9. CDM-Criteria for the Host Country
10. Tasks for the Government

To reach these targets, a combination of seminar training and training on the job is needed:

- The **Seminar Training** will enable the participants to assess the quality and operability of a CDM project.
- The **On the Job Training** will show the participants the practical steps towards a successful implemented CDM project by carrying out a feasibility study for a proposed CDM project.

The participants will be guided through the entire CDM Project Cycle in a step-by-step approach:



For each step of the CDM Project Cycle the participants of the Training course will be informed about

- The CDM Institutional Framework, and
- The eligibility criteria for participation in CDM

### The basis of the CDM according to §12 of the Kyoto Protocol is:

1. Voluntary participation approved by each Party involved;
2. Real, measurable, and long-term benefits related to the mitigation of climate change; and
3. Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.

After taking part in the CDM training the participants will be able to decide whether a proposed CDM Project corresponds with this basis as well as with the national sustainability criteria each project has to fulfil.

## CDM Training - Structure

### Training Module 1: "What is the CDM about?"

#### 1. History of climate change negotiations

Short overview of the past and ongoing negotiations on climate change to introduce the participants to the complex and often confusing rules of the Kyoto regime.

#### 2. The Kyoto Protocol

The Kyoto Protocol combines a system of rigid quantity targets for individual country emissions of GHGs and tight deadlines for those emission reductions, with flexibility provided to each country with respect to the manner in which it chooses to meet its emission targets.

#### 3. Basis of the CDM

Most CDM projects are anticipated to take the form of international investments in emission reduction projects, with private entities being the principal investors. CDM investments are expected to be "additions" to existing or planned projects rather than the sole medium for basic project financing. Thus, an investor would expect to earn a higher return from his investment through the crediting of CERs than without them.

#### 4. CDM Project activities

Here the above-mentioned CDM Project Cycle will be presented to the CDM training participants

Process/Step	Description	Key Institutions
<b>Project Development, Design and Financing</b>	<ul style="list-style-type: none"> <li>Identify and formulate project</li> <li>Conduct feasibility and baseline studies</li> <li>Arrange for necessary financing</li> <li>Seek government approval and assurance that project meets sustainable development goals of host</li> </ul>	<ul style="list-style-type: none"> <li>National governments (including CDM Agencies)</li> <li>Project Developers</li> <li>NGOs</li> <li>Development Banks</li> <li>Other Investors</li> </ul>
<b>Validation and Registration of Project</b>	<ul style="list-style-type: none"> <li>Approve project baseline/additionality</li> <li>Ensure adequate monitoring provisions</li> <li>Ensure public comment</li> <li>Register project with CDM Executive Board</li> </ul>	<ul style="list-style-type: none"> <li>Independent third parties</li> <li>CDM Executive Board</li> </ul>
<b>Project Monitoring</b>	<ul style="list-style-type: none"> <li>Track project performance during operation</li> <li>Collect data and keep records to ensure transparency</li> </ul>	<ul style="list-style-type: none"> <li>Project Operators</li> </ul>
<b>Verification, Certification and Issuance of Credits</b>	<ul style="list-style-type: none"> <li>Independently assess to determine quantity of emission reductions achieved</li> <li>Certify and issue CERs, based on verified emission reductions</li> </ul>	<ul style="list-style-type: none"> <li>Independent third parties</li> <li>CDM Executive Board</li> </ul>

### Training Module 2: "What is an eligible CDM project?"

#### 5. Eligible Types of CDM-Project

After the CDM training, the stakeholders will be able to assess whether a CDM Project meets the UNFCCC requirements:

- The host party confirms whether a CDM Project will assist it in achieving sustainable development
- Equitable geographic distribution
- CDM activities should lead to the transfer of environmentally safe and sound technology and know-how

Additionally, information on the CDM "Gold Standard" of the WWF will be given to the participants with the aim to for instance facilitate negotiations with NGOs.

#### 6. Small Scale CDM-Projects

This section deals with the definitions and rules for small scale projects:

- Bundling of project activities
- Requirements for the project design document
- Simplified baseline methodologies and monitoring plans

Information on the different types of eligible small scale CDM projects will be given to the participants.

#### 7. Baseline determination

The baseline can be defined as the reference development which hypothetically would have occurred, had there been no project.

Participants will be trained in using the different baseline methodologies for differing project types and in bringing them into line with the host country's national priorities.

### Training Module 3: "What is the significance for my country?"

#### 8. CDM-Design Models

Information on the different models (e.g., unilateral, bilateral and multilateral) will be presented.

#### 9. CDM-Criteria for the Host Country

According to each country's requirements, eligibility and sustainability criteria for CDM projects will be developed and designed in small workshops.

#### 10. Tasks for the stakeholder

Each different stakeholder will be trained on his specific needs and tasks concerning the implementation of CDM projects.

## Training Module 4: Study Tours

During these study tours the participants will receive information on foreign CDM-institutions, project design and implementation as well as governmental and investor related information from industrialised countries.



Chinese CDM Study Tour in Germany / Switzerland

Since each training has to be adapted to the specific needs of the trainees and the characteristics of their home country, the offered training sections are only structured suggestions which have to be modified and enriched with additional ideas, visits and activities.



Seminar in wind-blade production site in Sachsen / Germany

## Training Module 5: Site Visits

Site visits in the host country as well as abroad will help the participants to identify and implement CDM projects in their home country.



Site visit at Tri-Generation station in Berlin

## Educational Principles

**The training programme and its individual sections are based on the following principles:**

- Learning by doing wherever feasible and useful.
- Direct application of learned skills throughout the course.
- Use of real examples, plans and cases.
- The approach proceeds from the specific to the general, i.e. from the local to the provincial level, making the understanding of inter-linkages between the different levels more easy.
- The training reflects the way complex subjects are learnt. A combination of analytic and comprehensive learning processes is needed and visualisation plays a major role throughout the training.
- The training units are separated by time buffers. The inclusion of additional topics or further clarifications is thus possible.
- Avoidance of frequent fluctuation within the training faculty by formation of a permanently available team of trainers. This will also facilitate establishment of personal relationships between trainees and trainers.
- Monitoring and evaluation by the participants mostly on a weekly basis and a concluding evaluation session at the very end of the training.

## Training Module 6: On the Job Training by CDM Pilot Projects

The final step in the CDM training is the development and design of a pilot CDM project.

Here the participants will use the project cycle steps which they were trained in during the first three sections of the CDM training.

The participants will then be able to develop this pilot CDM project on a "learning-by-doing" basis.

## Evaluation of Training Measures

The aim of this evaluation is to find out whether the objectives CDM Training are met.

- Additionally, it helps us to continuously improve the quality and the relevance of the training measures.
- Generally, opinions and statements concerning the quality and effects of the training courses are acquired through questionnaires at the end of the course and modules. General questionnaires, i.e. not specific to the type of training module, ensure standardized evaluation criteria.
- Additionally, informal measures such as boxes to collect complaints and suggestion for improvement might be used.
- A follow-up of the training and the offer of further assistance is part of our dedication and responsibility. It helps to assure not only more effective guidance of the participants after their return, but also to use middle term impacts of the training to constantly improve our course offer.



CDM workshop in Tianjin / China

## Evaluation Levels

1. **Participants evaluate the trainer**, training module and the training environment on completion of each training course (P-T-Evaluation). This evaluation is obligatory.
2. **Trainer evaluates each participant** on completion of each training course (T-P-Evaluation). This evaluation is to be performed whenever possible, (i.e. if one trainer gets to know the participants for a longer period, for instance in training courses abroad)
3. **Institutions evaluate the impact of the training module on the institute** (I-P-Evaluation). This evaluation could be done as soon as the HRDP reaches a higher organisational level.

## INTEGRATION Capacity Building Project Examples

### INDIA / GERMANY

2002 - 2005

### ENVIRONMENTAL MANAGEMENT AND LAND BASED NATURAL RESOURCE PLANNING - TRAINING CUM VISIT

Three training courses (6 weeks each in India and Europe) for 45 officers of the Indian environmental and planning authorities. Spatial and regional planning from municipal up to federal level planning and the involvement of municipalities in:

- City planning, land use planning,
- industrial site visits,
- ecological sensitive areas,
- disaster prone areas.

The conclusions and results of project work during the training are used for implementation of the spatial environmental planning system in India.



### MOZAMBIQUE

2001 - 2005

### STRENGTHENING OF DISASTER MANAGEMENT POLICY

The project aims at the strengthening of Mozambique's National Disaster Management Policy and stresses the need for an Early Warning System, integrating a long term plan for responding to disasters as well as for preparedness and mitigation.

The development of a Human Resource Development Programme and Strategy (HRDP) and Training Measure Network includes a short and long term training and capacity building programme and will be a mayor contribution to this policy. It also includes the need of specifying roles and responsibilities of governmental and non-governmental bodies in the planning process of emergency response and disaster preparedness at national, provincial, district and local levels to efficiently involve all key actors in the planning, monitoring and response processes.

## Ongoing CDM-Activities of INTEGRATION

### CDM-Study for the P.R. of China

INTEGRATION is currently supporting the "CDM-Study for the P.R. of China" on behalf of the German GTZ.

The German experts are helping the Chinese CDM-Study team from the Tsinghua University Beijing by reaching the following targets:

1. Methodological and technical issues regarding the CDM as well as their practical application
2. CDM case studies in the field of energy efficiency, power production and renewable energies
3. Estimation of the potential for CDM projects in China and its share of the international CER market.
4. Study tour for Chinese experts from Ministries and the University of Beijing by INTEGRATION in September 2002.

### CDM capacity building - Example China

In 2003 INTEGRATION developed a CDM capacity building concept for the EU-China "Environmental Management Cooperation Program". The following human resource development tools were designed and will be carried out during the next two years:

1. Online training courses and databases as a resource for Chinese climate change stakeholders and decision makers
2. CDM Training Handbook for Trainers
3. Demand driven and needs oriented CDM train-the-trainers and training courses with preparation of CDM training guidelines on a modular basis
4. Multi-level evaluation of all CDM capacity building measures by designing specific quality assurance standards

### CDM-Handbook for Chinese stakeholders

INTEGRATION is preparing a CDM-Handbook for Chinese stakeholders on behalf of the EMCP project with special focus on the linking of the CDM with adaptation to climate change on the one hand and with capacity building needs on the other hand.

The paper will be published in spring 2004.

### CDM Training in Non-Annex-1-Countries

During a series of workshops on the CDM in the last few years, INTEGRATION environment & energy was able to give information about the ongoing negotiations on climate change and the significance of the CDM for developing countries e.g. P.R. of China, Nepal and Mongolia.

Additional service was offered in the fields of:

- Institutional building
- Creation of training materials
- Carrying out of energy-conferences
- Preparation of trade fairs for energy projects
- Website programming and newsletter layout



CDM-Seminar in Kathmandu, Nepal 2002

## INTEGRATION Emission Trading Services

### Services for the public sector:

- CDM Human Resource Development and Capacity Building
- General Climate Change Studies
- Dissemination of CDM-Information
- Sustainable Development Strategies

### Services for the private sector:

- CDM-Project Design and Implementation
- Emission Audit and CO<sub>2</sub> - Monitoring
- Baseline Studies
- Climate Change Reporting Services
- Development of Emission Trading Strategies
- Marginal Abatement Cost Calculation

**You are interested in carrying out  
CDM-Training courses?**

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