

Clean Development Mechanism and Methodology Development

By

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Project Based Mechanisms

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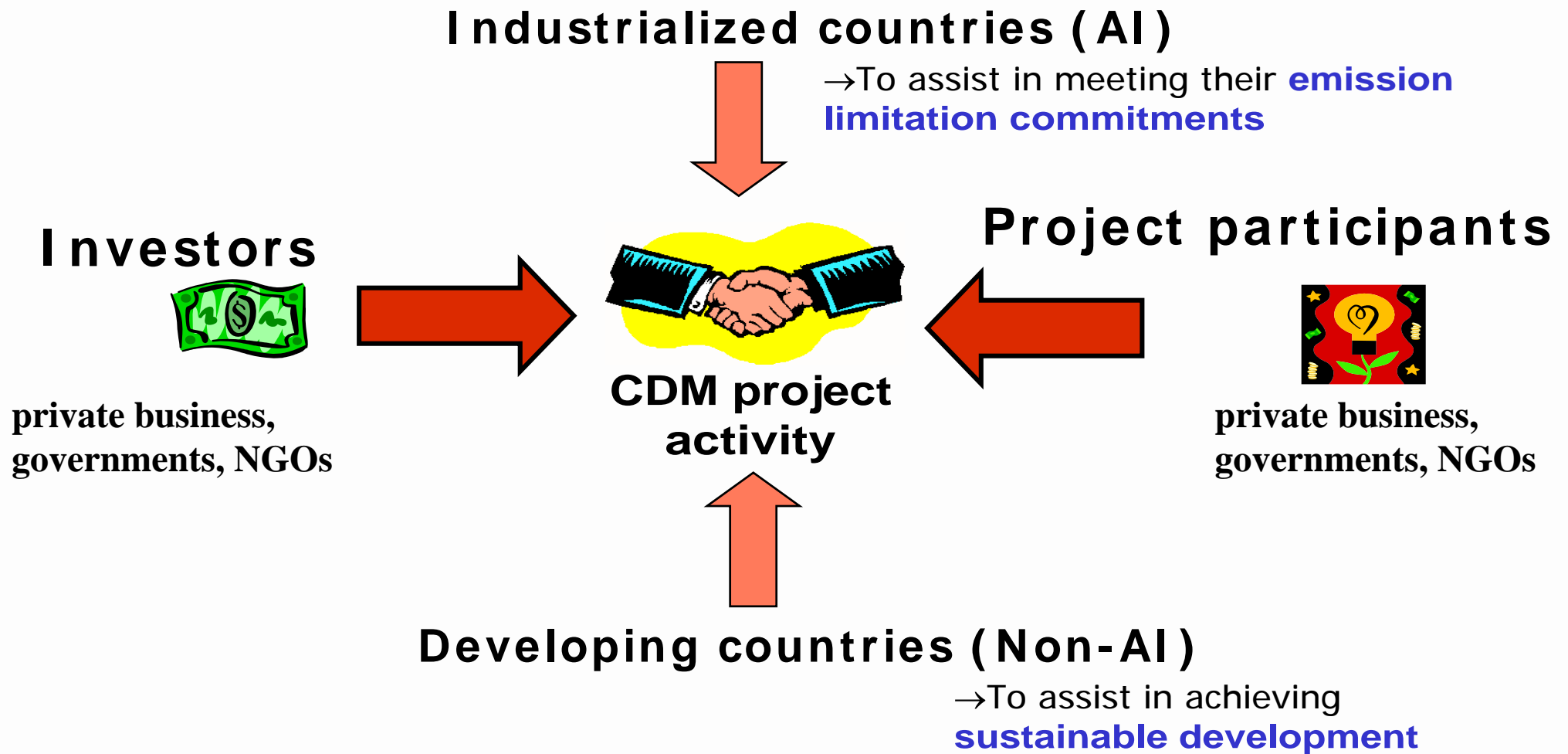
Workshop on Biofuels in Africa

November 30-December 1, 2006

Capetown, South Africa



What is the CDM - Incentives



What is the CDM - Players

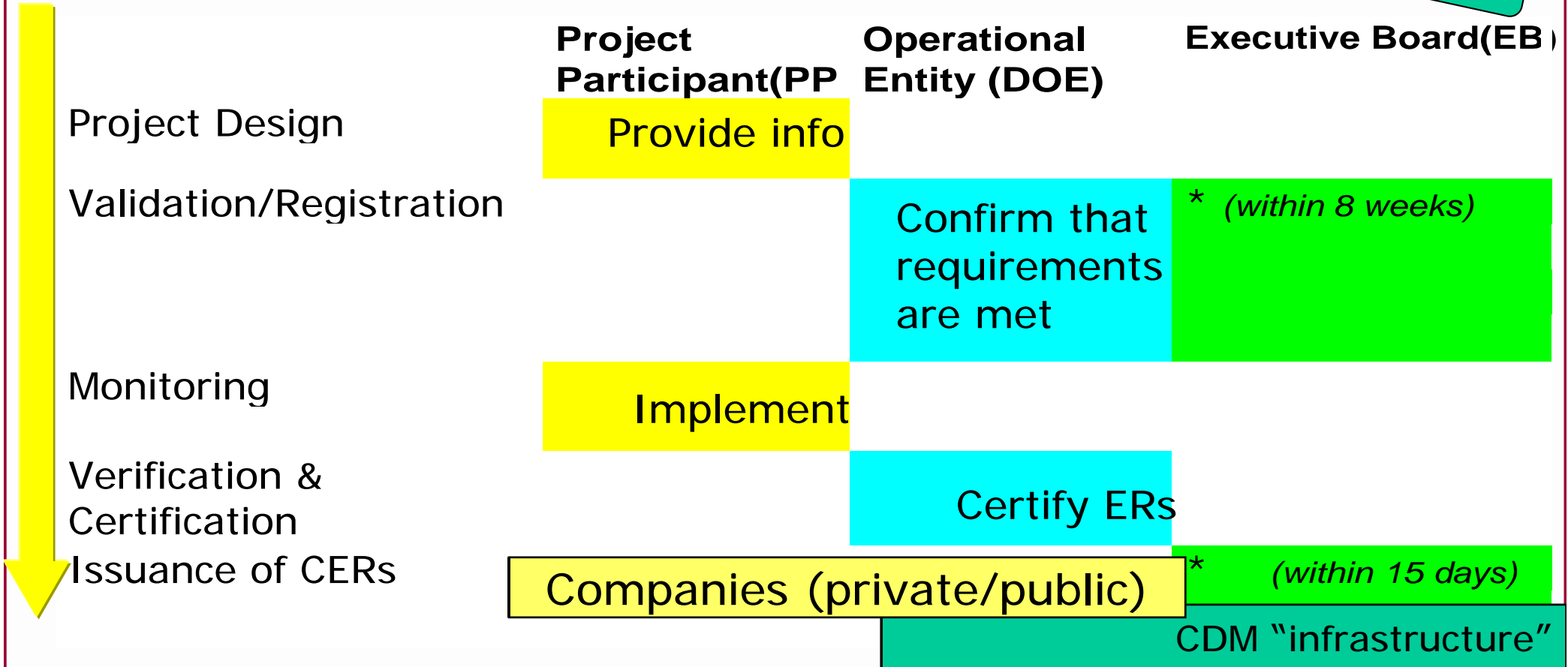
- COP/MOP
 - CDM Executive Board (supported by technical panels and working groups)
 - The UNFCCC secretariat
 - Designated national authorities (DNA)
 - Designated operational entities (DOE)
-
- Project participants

Types of Methodologies/ Project Activities under CDM

- **Small Scale CDM (non A & R) methodologies for projects with emission reduction limits of:**
 - **max output of 15MW or eq. (Type 1-renewable energy)**
 - **max output of 60 GWh per year (Type II -improvements in energy efficiency)**
 - **Less than or equal to 60 kt CO₂ eq. annually (Type III -other project activities)**
- **Small Scale CDM methodologies for A & R projects (SSC A & R):**
 - **Limit of 8 kt CO₂ per year**
- **Large Scale methodologies for non A & R projects:**
 - **No limit**
- **Large Scale methodologies for A & R projects:**
 - **No limit**

CDM project cycle - Roles and Responsibilities

COP/MOP

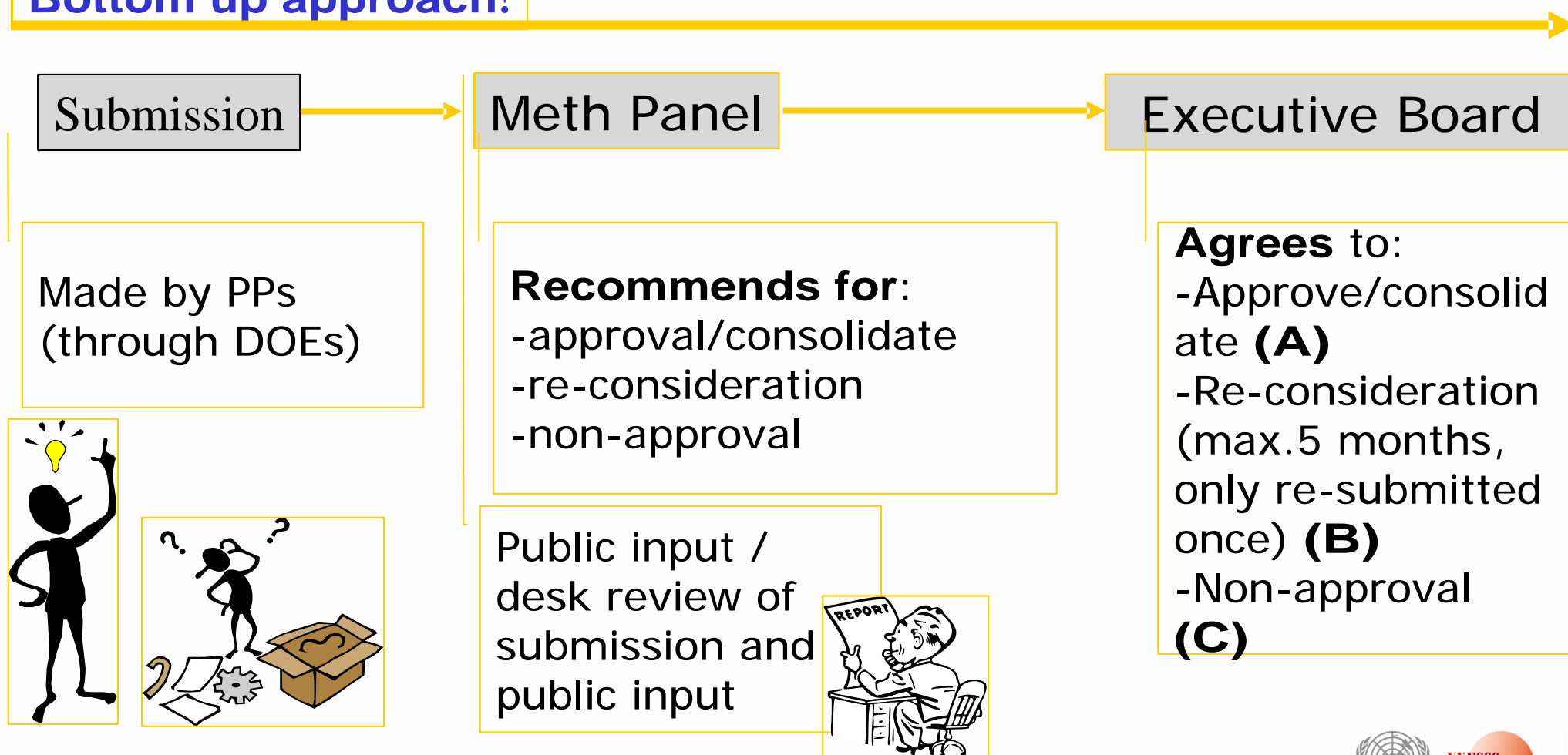


* An automatic step unless a review is requested. *Letter of approval from DNA involved required prior to request for registration.*



Methodologies - Process the Basics

Bottom up approach!



Elements of a CDM Methodology I

- **Project Boundary**
 - Spatial extent of boundary, emission sources within boundary
- **Applicability Conditions**
- **Baseline Scenario**
 - Baseline alternatives
- **Additionality**
 - Would the project happen under business as usual scenario?
- **Determining baseline emissions**
 - Emissions from baseline fuel example gasoline/ petro-diesel that would happen in business as usual

Elements of a CDM Methodology II

- **Estimating project emissions**
 - **Field Emissions - in production of biomass**
 - **Industrial Emissions**
 - **Transportation to end user**
- **Leakage Estimations**
 - **Displacement of land use activities (example, land clearance or land use change for bio-fuel crop production)**
 - **Competitive use for the bio fuel raw material**
- **Emission Reductions = $BL_{Emissions} - Project_{Emissions} - Leakage$**
- **Monitoring Methodology**

Emissions Reduction for a Biofuels CDM Project Activity

Emissions due to use of fossil fuel

Bio-crop production & biofuel processing

Fertilizer use
Transport of ingredients
Biofuel production process

Emissions outside PB

Displacement
of land use change

Calculate

Baseline Emissions (1)

Project Emissions (2)

Leakage Emissions (3)

Subtract 3 and 2 from 1

**Net Emissions
Reduction from
project activity**



Tools and Guidance for Methodologies

- **Tool for assessment and demonstration of additionality
(*Annex 8 of EB 22*)**
- **Methodological tool for determining methane emissions avoided from dumping waste at a solid waste disposal site, (*Annex 14 of EB 26*)**
- **Guidance on double counting for situations concerning the consumption only as well as the consumption and production of biofuel within the same project boundary
(*Annex 12, EB 26*)**
- **And more....[http://cdm.unfccc.int/ Reference/ Guidclarif](http://cdm.unfccc.int/Reference/Guidclarif)**

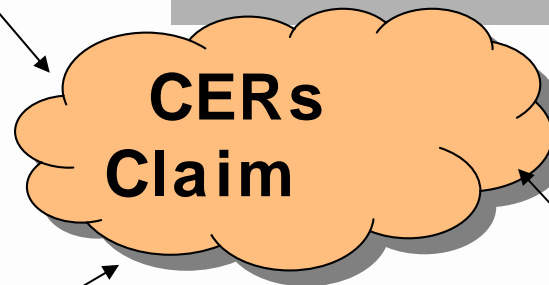
Double Counting

Producer of biomass



Double counting refers to the likelihood of emission reductions credits being claimed by more than one claimant in the production – supply chain (producer of biomass, producer of biofuel or consumer or by an Annex 1 party).

Producer of Biofuel



Consumer



Board Guidance from EB 26

- The Board considered the recommendation by the Meth Panel on the avoidance of double counting in project activities concerning blended biofuel for energy use and agreed to provide guidance on situations concerning the **consumption only as well as the consumption and production of biofuel within the same project boundary (Annex 12..discussed later)**.
- The Board agreed that further guidance shall be developed and provided for addressing the issue of avoidance of double counting in methodologies for project activities claiming CERs **from the production of biofuels only, while not taking into account consumers of these biofuels**. The Board called for public inputs in October 06 – Inputs available on the CDM website.

CDM – Executive Board, EB 26 Annex 12

- **To provide guidance for project activities that use blended fuel for energy use to avoid double counting due to:**
 - **Biofuel production**
 - **Biofuel use**
- **CERs may be claimed by:**
 - **Consumers (end users) of biofuels; or**
 - **Producers of biofuels provided:**
 - **consumers, to whom the biofuel is sold, are included in the project boundary**
 - **the emissions reduction due to biofuel are based on monitored consumption by the consumers included within the project activity**
- **CERs cannot be claimed for biofuels exported to Annex I countries**

CDM – Executive Board, EB 26 Annex 12

- **For claiming CERs, monitoring to ensure that biofuels are used for the intended purpose as proposed in the methodology, ie.**
 - **Consumed by the consumer (end user) for displacement of fossil fuels**
 - **Consumption by the end-user corresponds to the production of the biofuel**
 - **For project activities by consumers an estimate of leakage shall be provided**
- **Emissions from cultivation, harvesting of biomass used in preparation of biofuels**
 - **Emissions associated with the production of biomass shall be accounted for when calculating emission reductions**
 - **In case biomass originates from an A/ R CDM project activity emissions need not be accounted for (EB 25 paragraph 38)**

Biofuel CDM Methodologies

- **Methodologies taking into account this guidance can be submitted anytime by project participants**
- **The Board via its Meth Panel is currently developing a tool for “the avoidance of double counting in biofuel CDM project activities” to assist in the development of meths, which takes into account the guidance on double counting by the Board**
- **Several methodologies are under consideration by the Board concerning biofuels**
 - **All aim to reduce emission through use of biofuels in the transport sector**
 - **All deal with production of bio-fuels from**
 - **Jatropha seeds**
 - **Sugar cane**
 - **Crude Palm oil, Coconut and Sunflower Oil**
 - **Waste cooking oils**

Approved Methodologies (21st Nov 06)

Energy industries (renewable/ non renewable) (1)	22
Energy Distribution (2)	1
Energy Demand (3)	6
Fugitive emissions from fuels (solid, oil and gas) (10)	6
Fugitive emissions from production and consumption of halocarbons and sulphur (11)	2
Solvent use (12)	16

Information Sources I

- UNFCCC CDM website (<http://cdm.unfccc.int>)
- UNFCCC CDM News Facility (*Requirement to register as a UNFCCC CDM web site user (join) -> automatically subscribed*)
- Interactive map with registered project activities (<http://cdm.unfccc.int/Projects/MapApp>)
- CDM project search (<http://cdm.unfccc.int/Projects/projsearch.html>)
- CDM EB meetings are web cast (internet)
- Q&A sessions are held in conjunction with COPs/SBIs

Information Sources II

- Approved methodologies, SSC and A & R
<http://cdm.unfccc.int/methodologies>
- Forms, PDDs
<http://cdm.unfccc.int/Reference>
- Request for clarification on application of approved methodologies
<http://cdm.unfccc.int/methodologies/PAmethodologies/Clarifications>
- Request for revision of methodologies
<http://cdm.unfccc.int/methodologies/PAmethodologies/Revisions>

Interface

- Provide inputs on public calls
[http://cdm.unfccc.int/ CDMNews](http://cdm.unfccc.int/CDMNews)
- Apply on roster of experts for working groups: A & R, Small Scale, Meth Panel. Call for experts posted on
[http://cdm.unfccc.int/ CDMNews](http://cdm.unfccc.int/CDMNews)

THANK YOU

