

CLEAN DEVELOPMENT MECHANISM (CDM)

SPECTRO ANALYTICAL LABS LTD is one of the leading laboratories in India, also offering a wide range of Integrated Solutions in various Environmental Sectors. **CDM** is one area where **SPECTRO** offers its elite services.

Services offered under CDM:

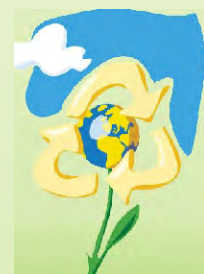
- ★ Carbon Trading Solutions
- ★ Consultancy in CDM Projects of various sectors
- ★ Designing of Project Design Documents (PDD's) as per UNFCCC Guidelines
- ★ Development of Methodologies for Baseline Establishment of a project
- ★ Facilitation of approval by Host Country's Designated National Authority
- ★ Facilitation of identification of DOE for Validation, Verification and Monitoring purposes along with registration with UNFCCC
- ★ Facilitation of suitable buyers of CER's and VER's



Clean Development Mechanism (CDM): An arrangement under the Kyoto Protocol that allows Real, Measurable and Long Term benefits in forms of **CER's** (Carbon Emission Reductions)/**Carbon Credits**, or reductions that are additional.

CDM includes: -

- Generation of Investment in developing countries
- Enhancement of Environment friendly technology transfer
- Promotion of **Sustainable Development**
- **Additionality:** Finance, Technology Transfer



Present day scenario reveals that human activities like Industrialization, Transportation, Waste Generation, Mining, Agriculture etc. have lead to the emission of toxic gases called **Green House Gases (GHG' s)** such as **CO₂, N₂O, SF₆, HFC's and PFC's** into the atmosphere leading to **GLOBAL WARMING**.

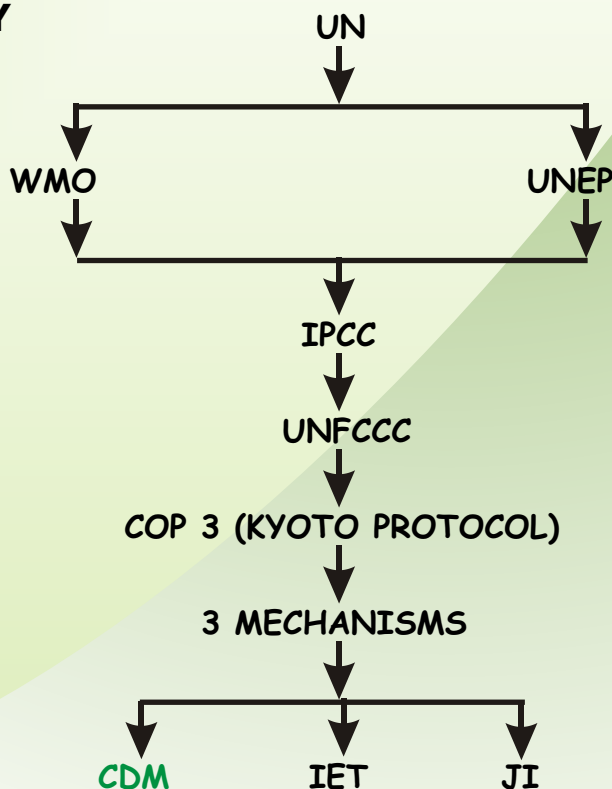
CO₂ being the most dangerous of all, has been increasing one's **CARBON FOOTPRINT** constantly. **Sustainable Development** needs to be achieved so, therefore, **CDM** was introduced in Kyoto (Japan), in 1997, with an objective to achieve **Sustainable Development**.



We have specialized in handling CDM projects in various sectors in accordance with latest UNFCCC guidelines. Some of these projects include:

- Waste Heat Recovery (WHR) Project of 6 MW capacity Cement Plant in Tamil Nadu
- Waste Heat Recovery Project of 10 MW capacity Coke Oven Unit in Jamshedpur (Jharkhand)
- Waste Heat Recovery Project of 20 MW capacity Sponge Iron Unit in Raipur (Chhatisgarh)
- Establishing a Captive Power Project (CPP) for a Cluster of Dyeing Units in Textile Industry
- Establishing a Captive Power Project (CPP) for a Cluster of Looms in Textile Industry
- Wind Energy Project
- Solar Power Project

CDM HISTORY



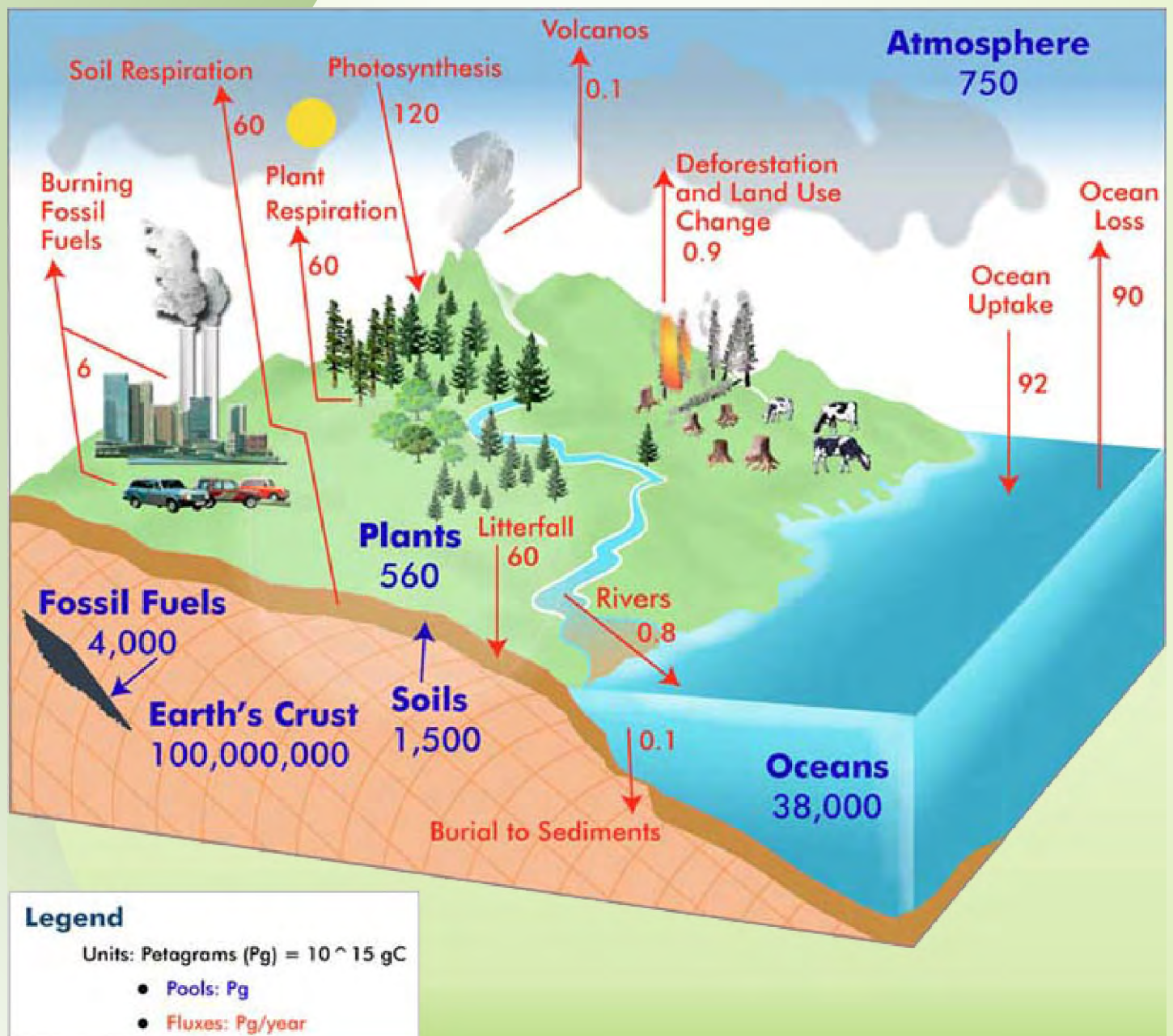
CDM came into existence in 2005. Countries ratifying **Kyoto Protocol** are committed to reduce their **GHG's** emissions by 5% from 1990 levels between 2008 and 2012.

CDM- ELIGIBILITY CRITERIA

- Project started after 01/01/2000
- Meets **Sustainable Development** criteria
- Baseline- Scenario that reasonably represents the anthropogenic emissions by sources of **GHG's** that would occur in the absence of the proposed project activity
- Additionality- To ensure that emission reductions due to BAU measures in developing countries should not be credited under **CDM**

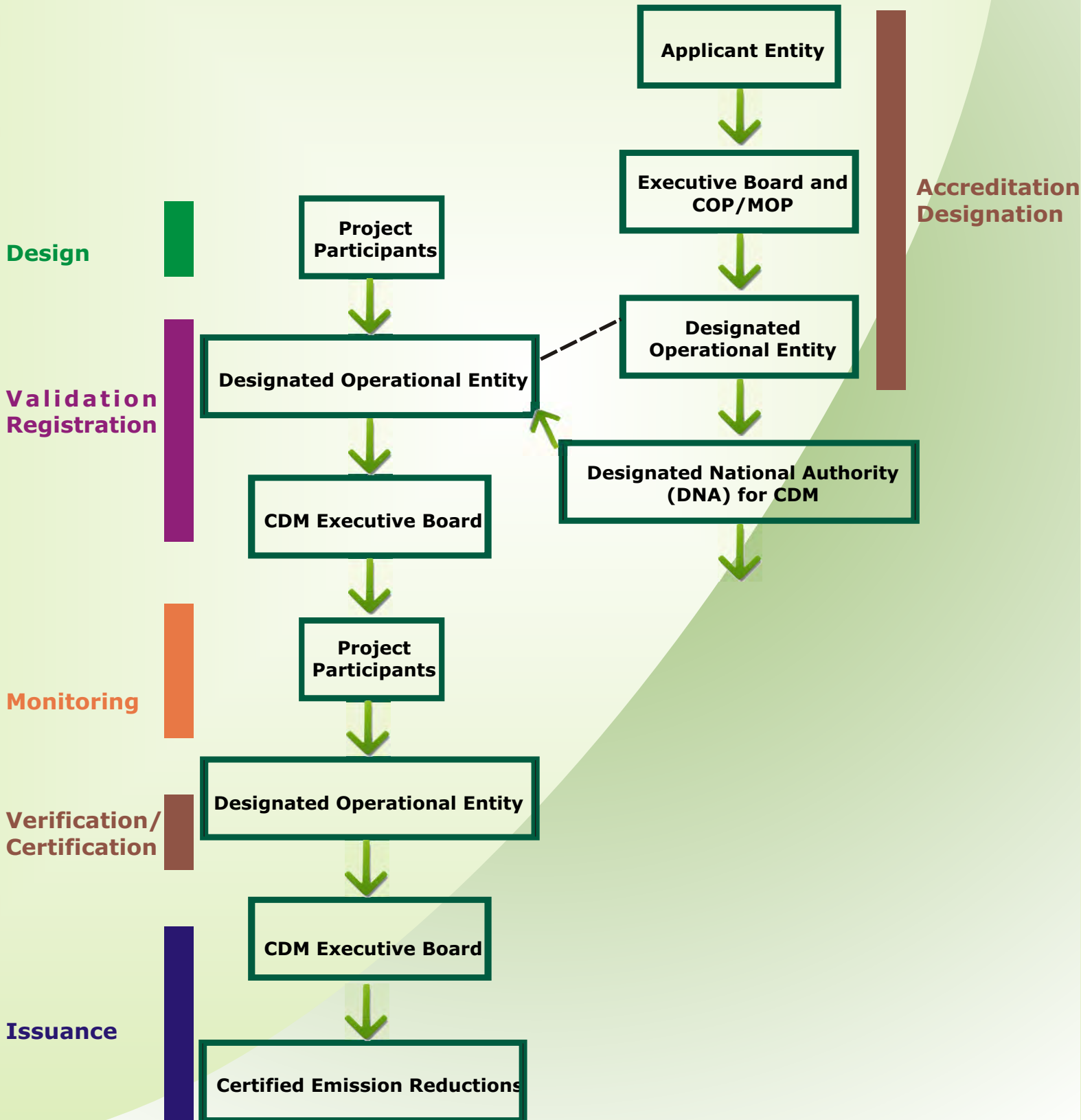
1 CARBON CREDIT (CC) = 1 TONNE OF CO₂ EMISSION

CARBON CYCLE



STAGES IN A CDM PROJECT IN INDIA

- **Preparation** of Project Design Document (PDD) by the Project Developer
- **Approval** from an Indian Designated National Authority (DNA)
- **Validation** of the project activity by an independent Entity (Designated Operational Entity DOE)
- **Registration** of the project activity by UNFCCC **CDM** Executive Board (EB)
- **Monitoring** and **Verification** of the project activity by DOE
- **Issuance** of Carbon Credits by UNFCCC **CDM** EB



We offer Integrated Solutions in Clean Technologies which are consequents of CDM. Some of them include:

- GREEN BUILDINGS
- CLEAN FUELS
- CFL's, SOLAR HEATERS
- WIND TURBINES
- SOLAR PANELS to capture and store heat from Sun's rays
- 3 R's- Reduce, Reuse, Recycle



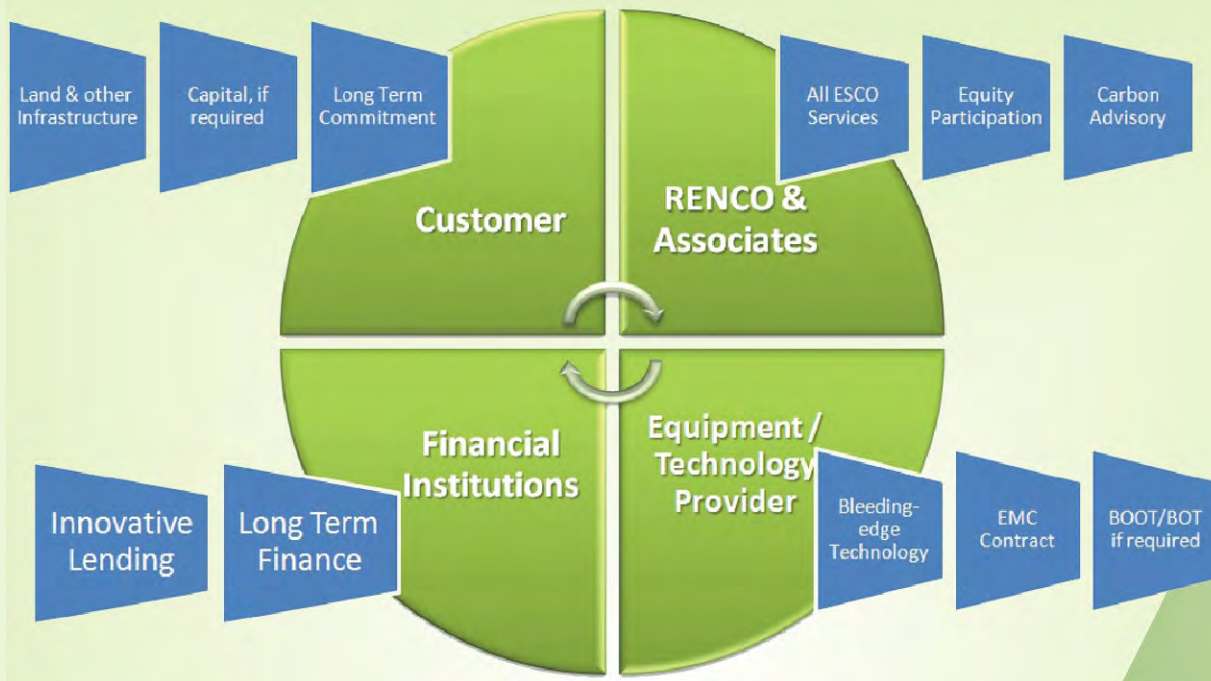
SPECTRO- "AN ENERGY SAVING COMPANY (ESCO)"

SPECTRO, in association with RENCO TECHNOLOGIES PVT LTD, has introduced a concept of "ESCO" Model. It has been seen that many industrialists are willing to reduce their energy consumption but at the same time are reluctant to put in investments in capital equipments.

"ESCO" Model offers a concept such that both the Technology Provider and the End User come up with a win-win situation where both of them can simultaneously benefit from the revenue generated from "Carbon Credits" and Energy Savings, which helps to reduce the financial liability.

We offer flexibility to our clients through "ESCO" by forming a **SPV (Special Purpose Vehicle)**. **SPV** is a Joint Venture comprising a structure where the Project Developer, Finance Provider and the Service & Technology Provider has a commensurate stake in the revenue generated from the project and therefore maintaining equilibrium throughout.

ESCO Project Stakeholders



ACCREDITATIONS/CERTIFICATIONS/RECOGNITIONS/APPROVALS

- NABL per ISO-17025
- ISO per 9001 - 2000
- Ministry of Environment & Forest
- State Pollution Control Boards (Haryana, HP, Orissa)
- NPC (Environment Division)
- WAPCOS
- Bureau of Indian Standards
- R I T E S
- Rail Tel corporation of India
- Airports Authority of India
- Director General of Civil Aviation
- Delhi Metro Rail Corporation Ltd
- R. D. S.O
- World Food Programme
- Bureau Veritas
- D G S&D
- G A I L
- Ministry of Defense

A Leading Analytical Laboratory of India



ISO-9001-2000 Certified and Accredited by NABL



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