

National Workshop on Clean Production and CDM

Road Map towards CDM and Clean Production

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Linkage of CDM and Clean Production

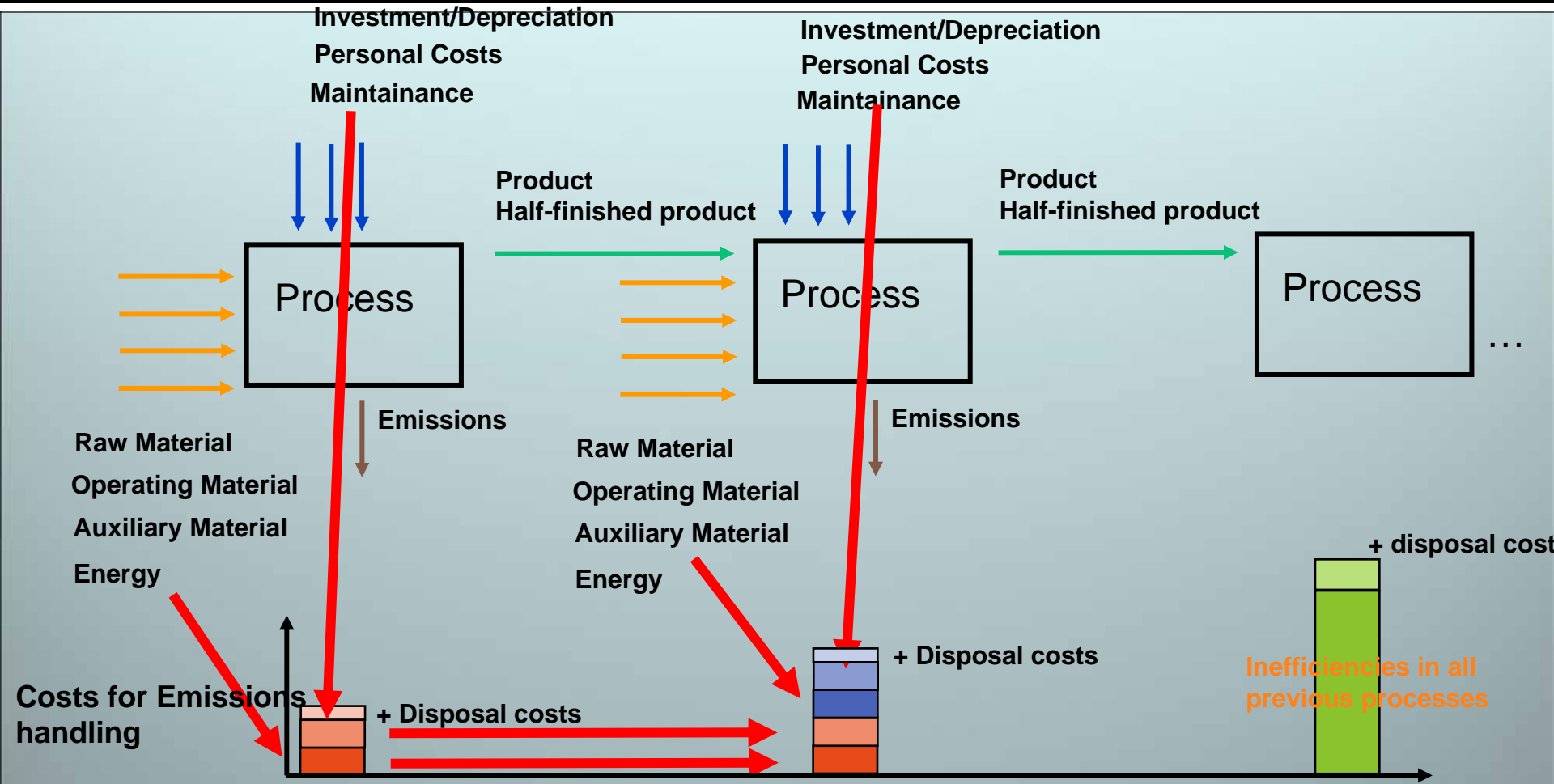
- Clean production narrows down to Industrial sector
- CDM is a sub-set; all clean production system is not eligible for CDM



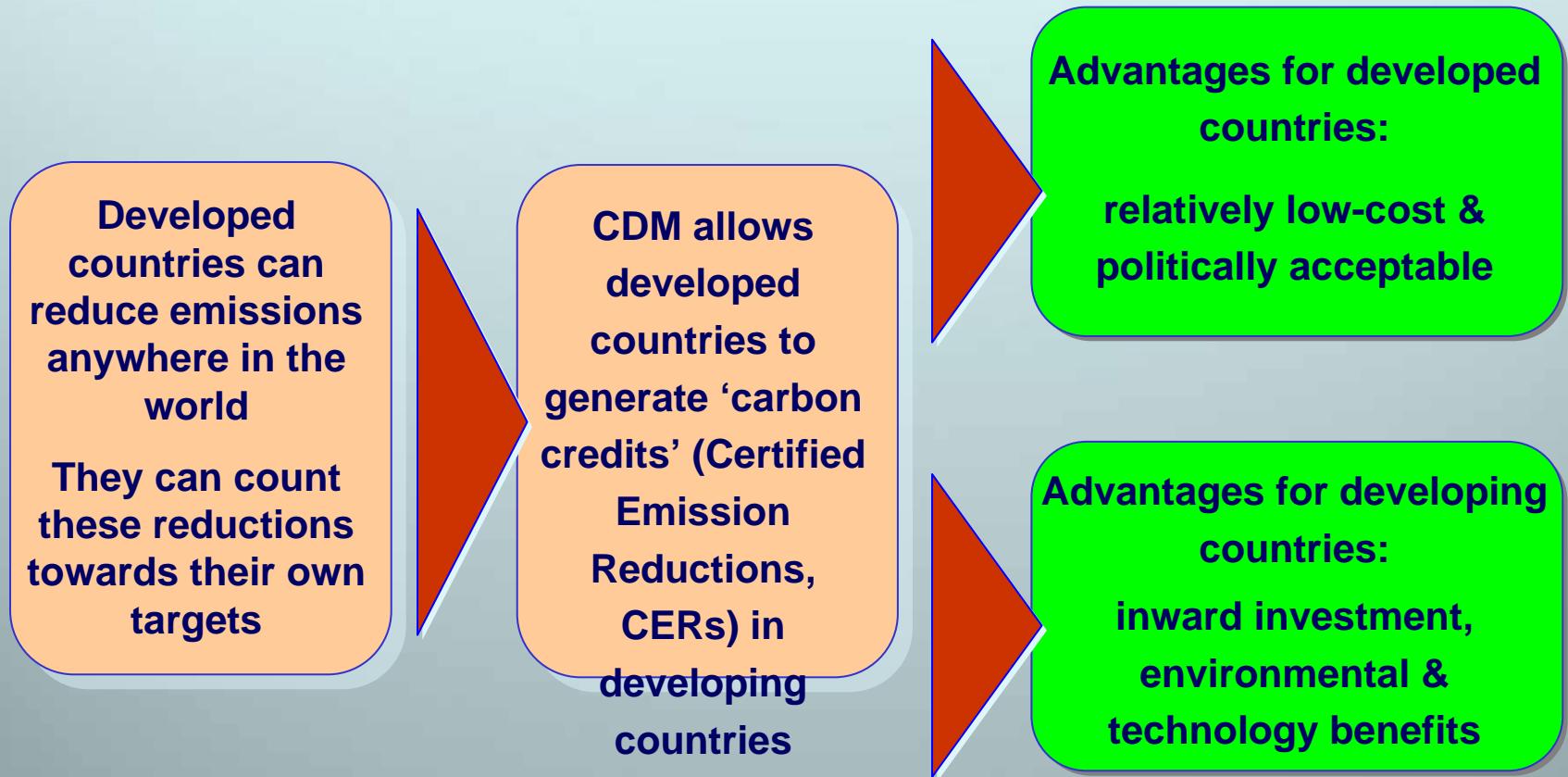
Clean Production Concept

- Input-Substitution
- Good Housekeeping
- Internal Recycling
- Technological Optimisation/Change
- Optimisation of the Product

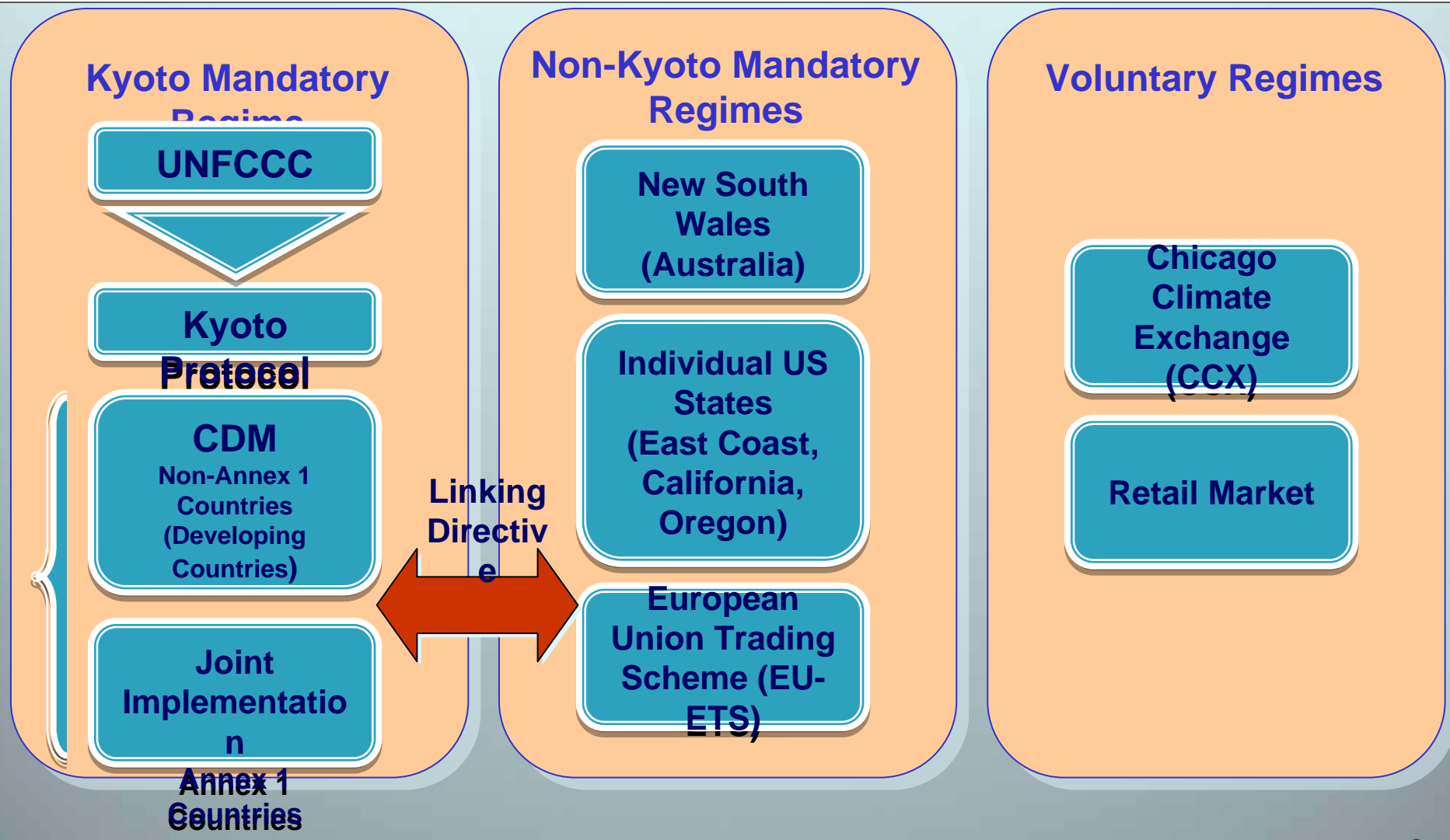
The Process



Climate Change and CDM



There are over 45 carbon markets – but 3 principal regimes



Carbon Market

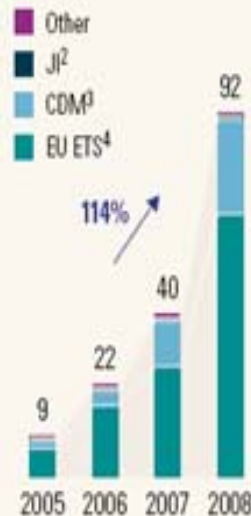
Carbon markets, today and tomorrow

Today's €92 billion may grow into €2 trillion by 2020.

Trading value of carbon markets

Global markets today...

€ billion



Countries and sectors under cap-and-trade systems

...and tomorrow¹



India: CDM and Clean production

- India ranks second in terms no of registered projects by host countries but 25% of CER
- Total GHG Emission from India: 1228.5 million tonnes of CO2 Equivalent
- In CDM context: the clean production technology include:
 - EE
 - Waste Recycling
 - Biomass gasification
 - Supercritical Technology
- Programmatic CDM is next big thing
- Total potential as estimated in the middle of 2008 from 1100 projects was about 100 million CERs
- It grew 40% on a year to year basis
- Annual growth is about 10%
- Prices have started climbing to 13-15 euro/CERs

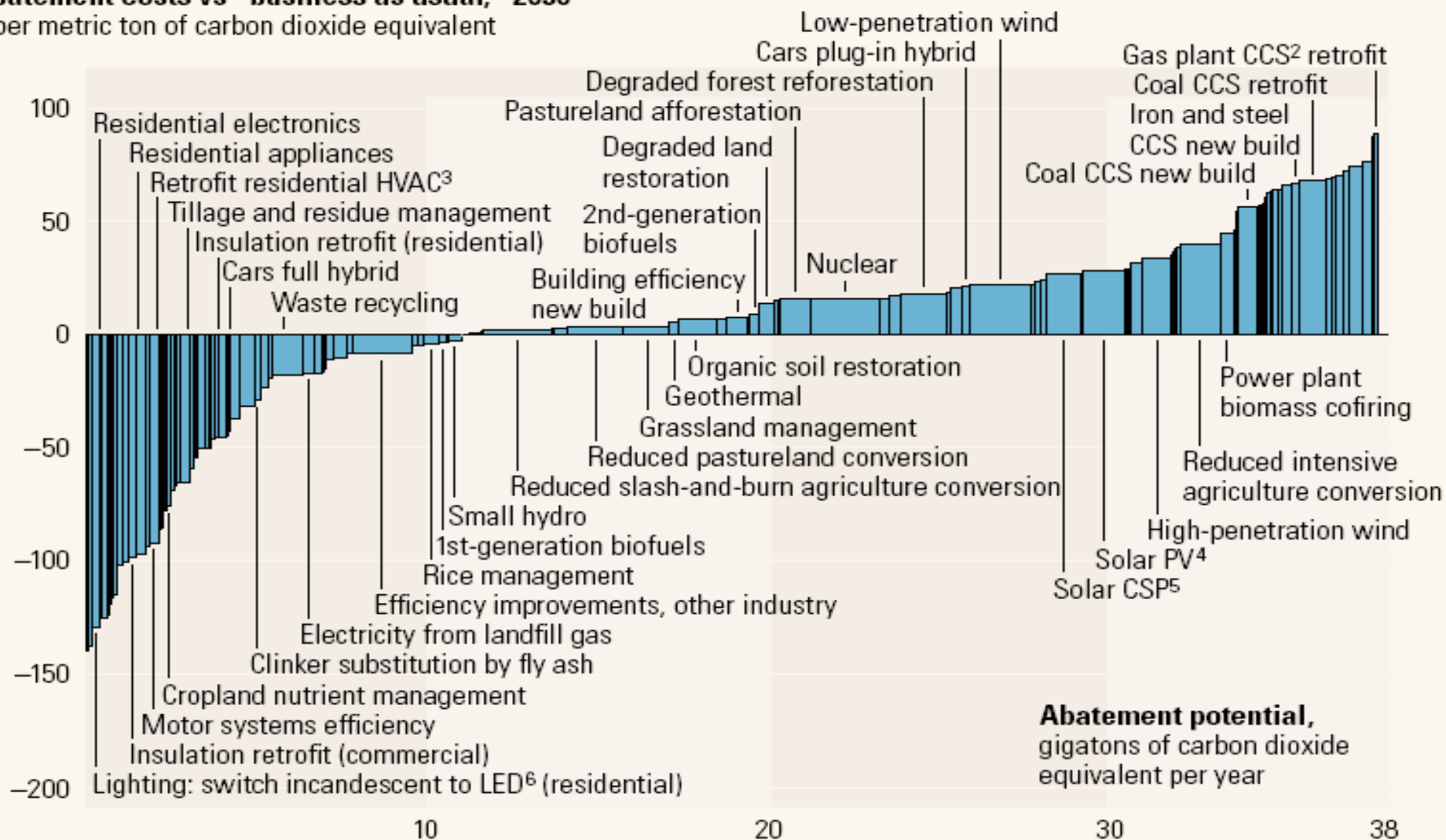
Context of CDM Cell in IPICOL

- ❖ IPR Programme provided the required momentum to the industrial growth in the state-big ticket investments in metal, power, cement came:
 - ❖ Government of Orissa felt the need for sustainable management of the environment – a goal level need in IPR
 - ❖ Why IPICOL: Single Window Facilitation Point
 - ❖ Why CDM?
 - ❖ CDM draw both public and private capital, as new and additional sources for sustainable development (SD)
 - ❖ Emissions reduction (ER, return of CDM) are paid upon annual independent verification. Such payment on delivery functioned as a collateral to achieve sustainability
 - ❖ ER purchase agreement provides additional cash flow to project, thus increases its financial stability
 - ❖ CDM payments are in hard currency, reducing financing risk for foreign lenders
 - ❖ CDM contributes to global environment as well as local environment
- ❖ CDM usually provides a participatory approach for host country and local community
 - ❖ When we started 8 projects in cycle 3 registered now 53 projects in cycle and 13 registered.

Future sectors

Abatement costs vs "business as usual," 2030¹

\$ per metric ton of carbon dioxide equivalent



The CDM is Not Just about Manufacturing sector...

Bio-carbon

- Forestry plantations – e.g. restoration of mangrove forests
- Agro-forestry – e.g. shade crops, nitrogen capture in soils
- Bio-fuels – e.g. bio-ethanol from molasses, bio-diesel from palm oil



Forestry



Agro-forestry

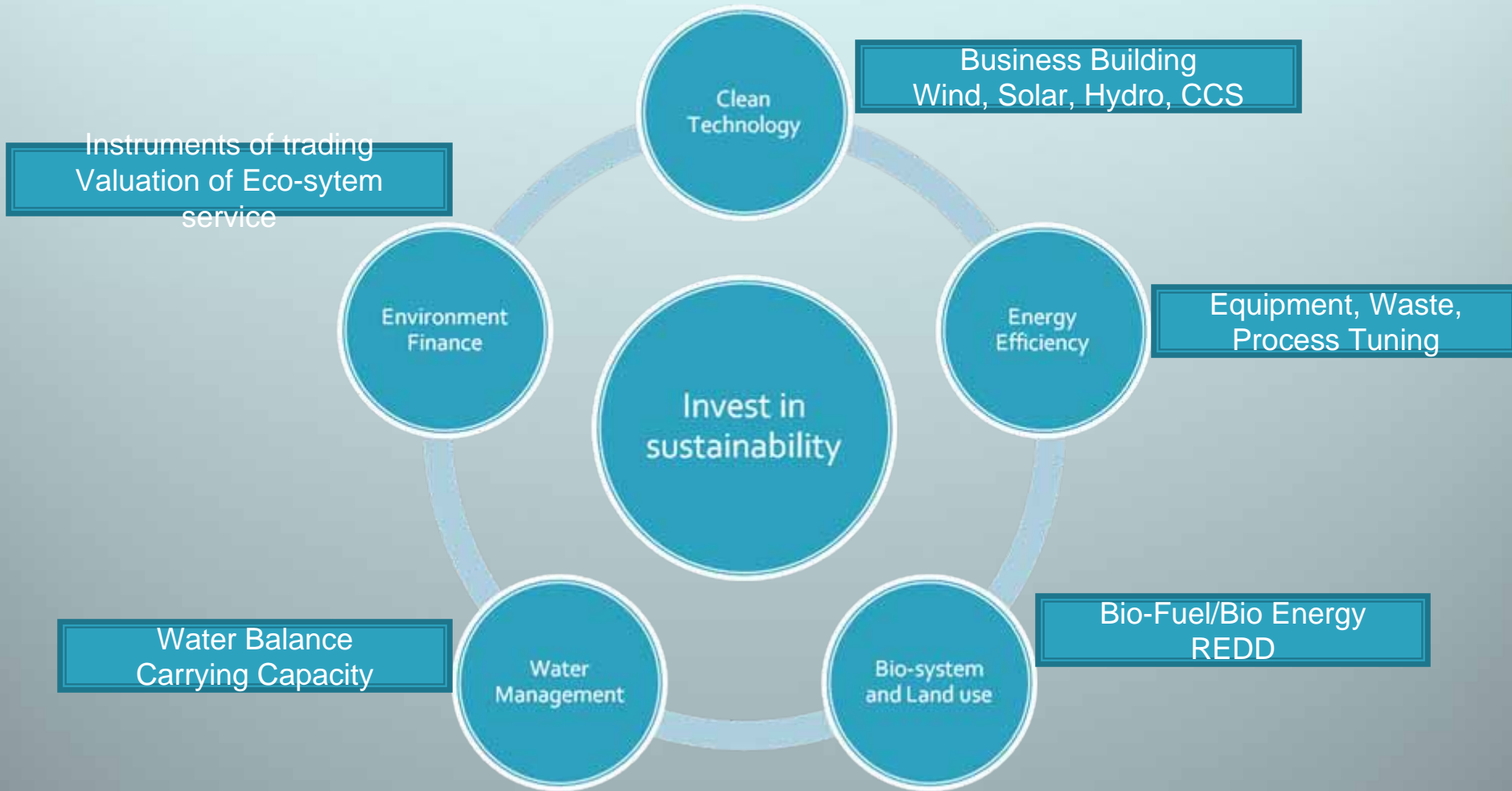


Bio-fuels



Transport

Way Forward



ROAD MAP AHEAD....

- Strategy needs to be formulated to initiate the cleaner initiative in line with the National Climate Change Action Plan.
- Others area like Energy Efficiency as pointed out in the NCCAP need to be focused at with BEE
- Strategy needs to be formulated on Emerging Areas like water conservation which is going to impact us both directly and indirectly.
- Development of technical know how on industrial waste and water recycling plan along with rainwater harvesting and water use efficiency.
- Emphasis to be improvised upon improving the environmental governance in medium and small industries and create awareness about the triple bottom line reporting.
- Areas that need special attention but can be addressed with additional focus and work on:
 - Taking forward RGVY and VESP identified in the first phase in association with OREDA.
 - Taking forward REDD and CAMPA based work with Forest Department

Policy Concerns for Clean Production and CDM

- Participatory and co-management approaches : a shift from only private approach
- Framework for sustainable management of MSMEs and their linkages into CDM market and attempting cleaner production in clusters
- Synergy between sectors: industry - forests and other sectors such as energy, poverty alleviation, empowerment, food security
- Negotiate the special inclusion of 'forest management practices for industries committing plantation /renewables etc. in first commitment period itself to meet the sustainable development criteria
- Inclusion of local community for deepening the carbon market
- Frame/modify rules to ensure that local communities/stakeholders are part of C deals
- Seek CDM inputs for technological enhancement, capacity building and institutional reforms

Thank you for your attention

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