

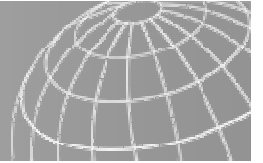
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Energy Efficiency Practices - Approach Analysis

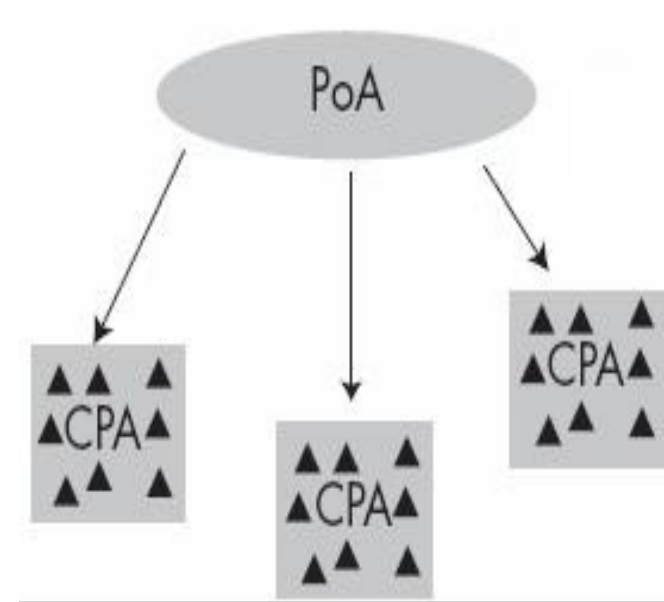
Experience from Bachat Lamp Yojana

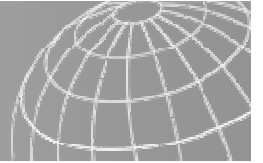


pCDM Approach

Clean Development Mechanism provides for the development of Programme of activities.

The programme itself does not achieve the reductions, but provides the framework for emission reductions to occur through certified project activities

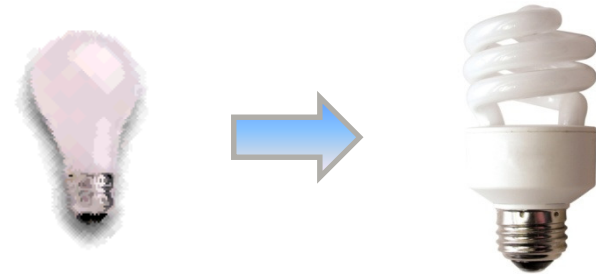




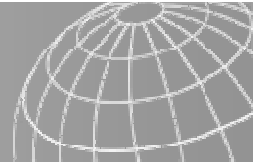
Bachat Lamp Yojana

Using pCDM approach to finance and hasten..... ..Market transformation for energy efficient lighting

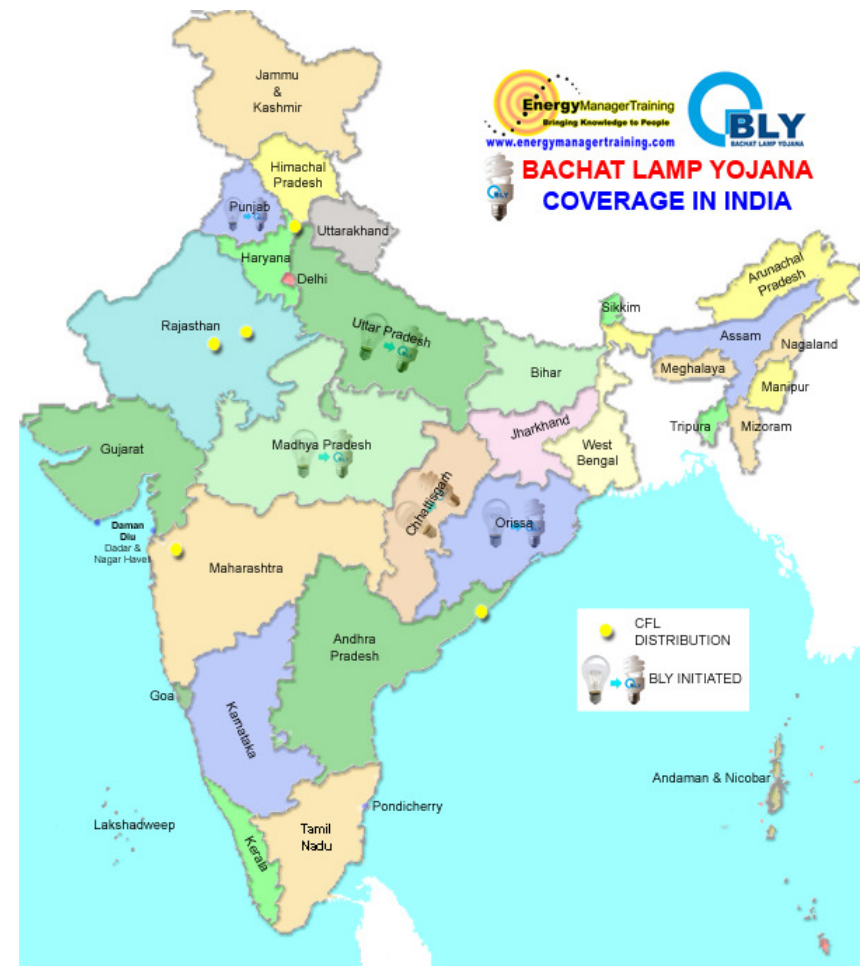
- 400 million light-points in India
- Estimated BLY projects : 400+



Bachat Lamp Yojana

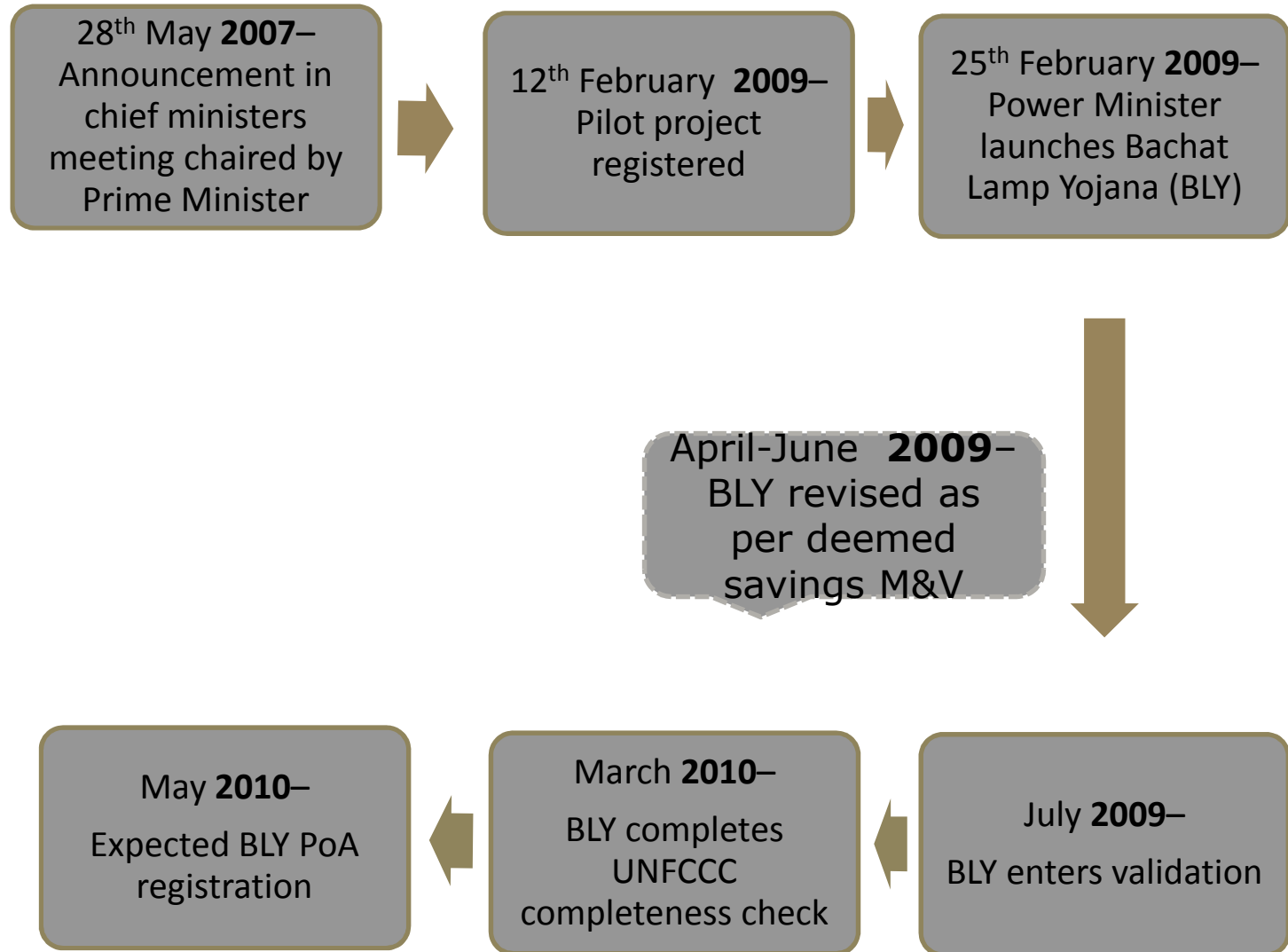


- **Jurisdiction:** India
- **Year:** 2007
- **Obligated Parties:** BEE, Utility, Investor
- **Driver & Purpose:** Using CDM to finance..... ..Market transformation
- **Objective--**400 million light-points in India to be replaced
- Estimated BLY projects : 400+

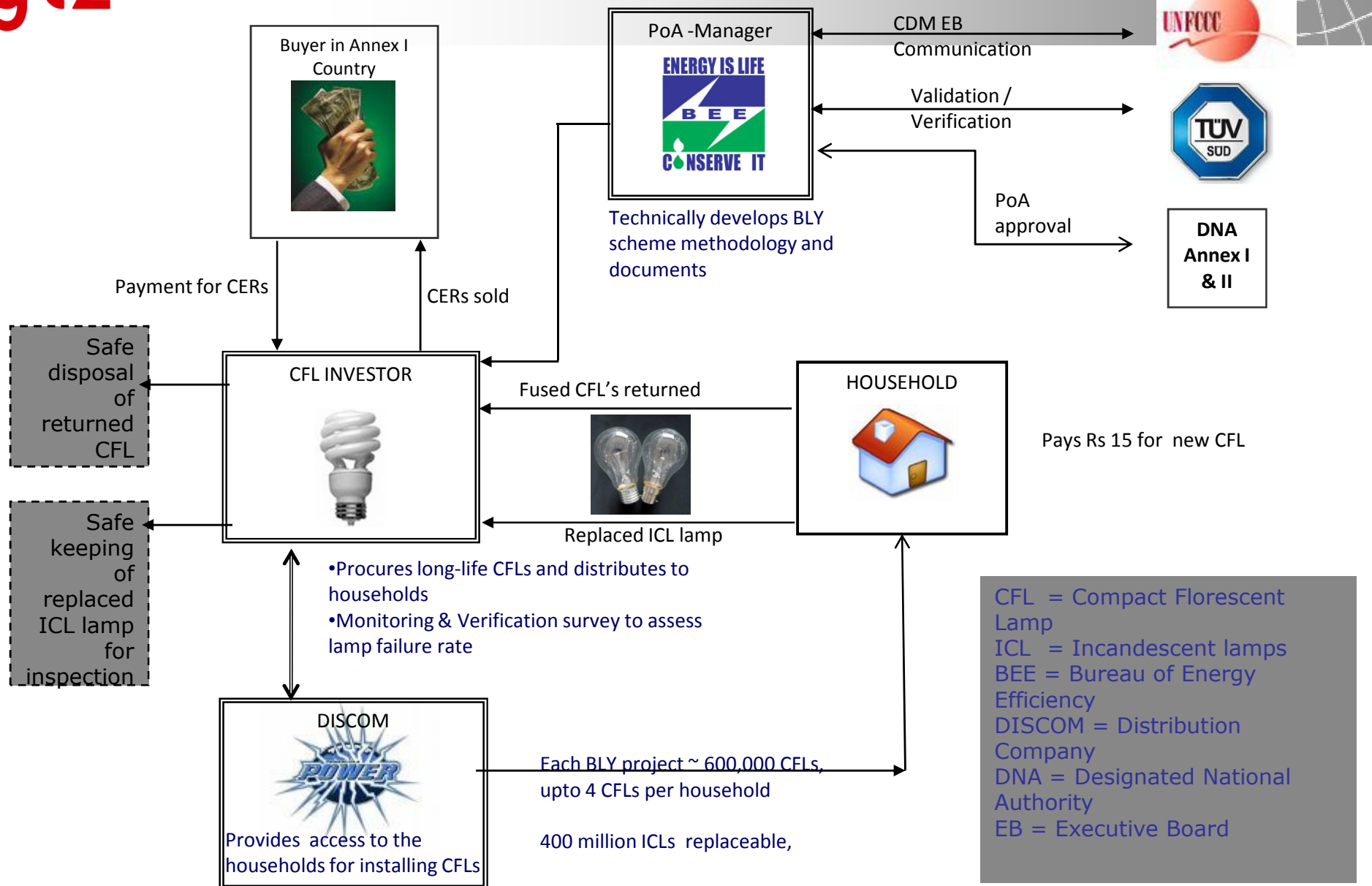


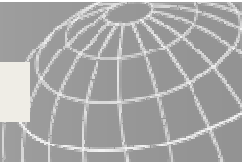


BLY Chronology: Slow and Steady



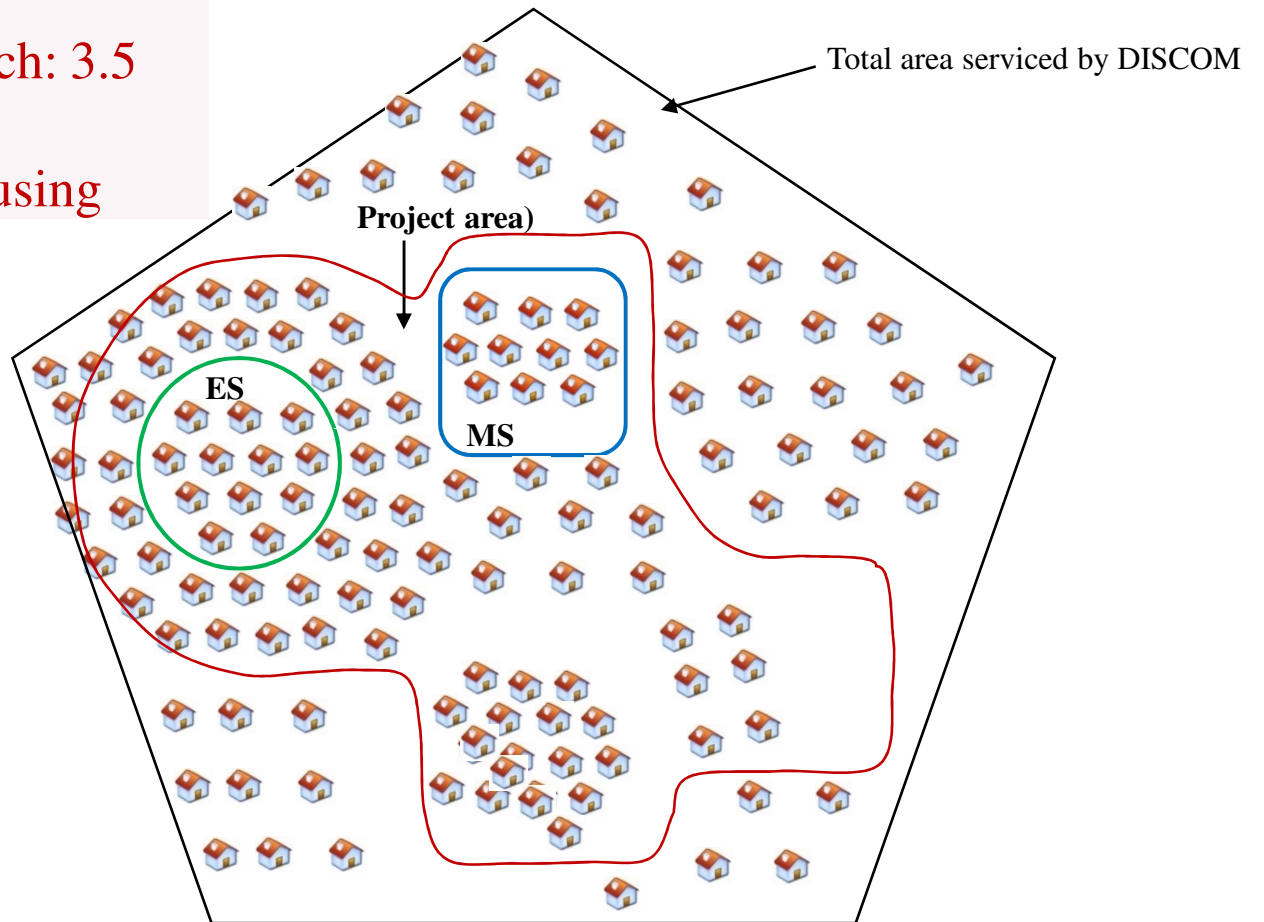
BLY Institutional Schematic



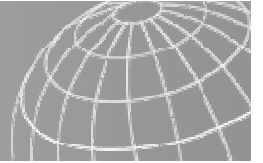


Simplified M&V: AMS III

1. Deemed savings approach: 3.5 hours / day/ CFL
2. CFLs in use monitored using surveys



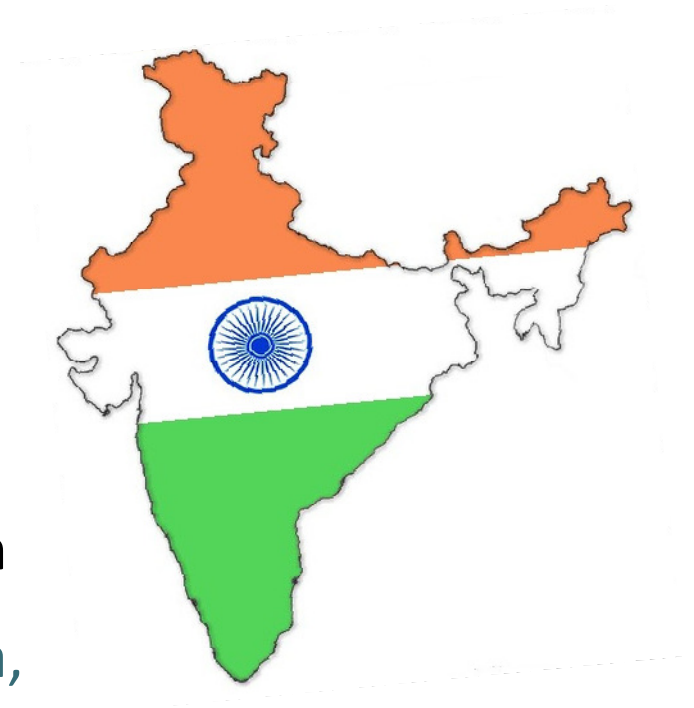
ES = Ex-ante survey
MS = Monitoring Survey



BLY PoA expected UNFCCC registration by May 2010,

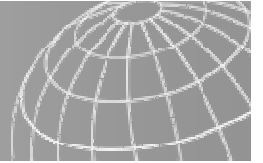
Within 2 months of PoA registration, 42 CPAs:

- 4 CPAs in Uttarakhand
- 23 CPAs in Kerala
- 12 CPAs in Punjab
- 3 CPAs in Andhra Pradesh



Within 12-18 months of PoA registration

- Expected 400+ CPAs all across India,



Savings per BLY project

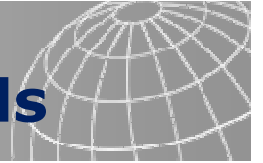
- 400+ CPAs all across India, ~ 10 MW saving per CPA
- GHG reduction: 22,000 tCO_{2e}

Net avoided Capacity Savings

- ~4000 MW



Four Learning's for Developing Energy Portfolio Standards

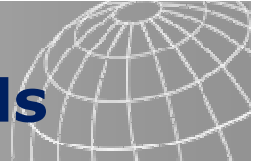


1. Choose Approach

- Top down
- Bottom Up

Tip: The choice of approach is dependent on at what level the resources are available for design and implementation.

- Whatever the approach; always ensure the last mile connect.
- Minimize transaction costs

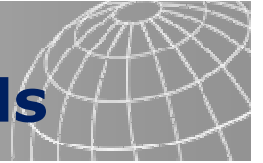


2. Design Monitoring & Verification using

- Simple Deemed methodologies
- Pre-defined sampling plans

Tip: The investors prefer pre-defined acceptable methods to control project risk to ensure predictability of returns.

- Show the carrot, allow to smell the carrot and sure enough the horses would run.

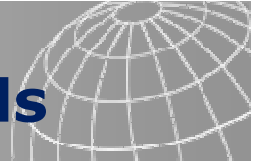


3. Define contracts covering

- Roles and responsibilities
- Liability payment
- Savings / Certificates allocation
- Project financial assignment

Tip: When the rubber meets the road, erasers will not do, one needs to mould tyres.

- You may know the scheme design by heart, but to define contracts bring in the professionals viz. lawyers

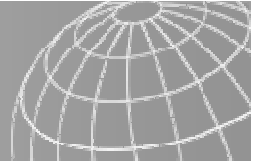


4. Perform Stakeholder Consultation

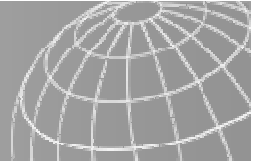
- Provides 360° due diligence
- Builds transparency of decision making
- Ensures buy-in

Tip: Once the design is freezed and approved, avoid unilaterally tinkering with the design or interpreting methods of implementation

- This could have financial repercussions to the stakeholder



- 1) Choose Approach**
- 2) Design simple Monitoring & Verification**
- 3) Define contracts**
- 4) Perform Stakeholder Consultation**



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