

Public Private Partnerships in Promoting Energy Efficiency in Municipalities

Dr. Pradeep Perera
Principal Energy Specialist
Asian Development Bank

Roles of National & Municipal Governments in Promoting Energy Efficiency

National Government

- Overall Energy Policy
- Energy pricing / subsidies
- Tax incentives for energy efficient appliances
- Penal taxes on energy intensive products
- Energy Efficiency Standards
- Energy Intensity targets for provinces
- Fiscal Funds for promoting Energy Efficiency

Municipal Governments

- Responsible for implementing national energy efficiency programs
- Providing additional incentives/ subsidies to supplement fiscal incentives
- Forming partnerships with private sector entities to promote energy efficiency

How Can Cities promote Energy Efficiency

- **Technology Dissemination & Demonstration**
 - Establish technology and information dissemination centers to facilitate technology transfer.
 - Provide cash subsidies to EE demonstration projects undertaken by private sectors.
 - Establish Super ESCO to identify energy saving opportunities and link with EE technology providers.
- **Regulatory Interventions**
 - Establish energy efficiency standards to be met by new energy intensive industries.
 - Stipulate energy efficient labelling requirements
 - Initiate actions to decommission obsolete and inefficient industrial facilities
 - Establishing building energy efficiency standards

How Can Cities Partner with Private Sector to promote Energy Efficiency

- Entering into partnerships with private sector to Improve Energy Efficiency in Municipal Facilities
 - Outsourcing energy saving investments in water supply, water treatment, public buildings etc to ESCOs under EPC contracts.
 - Technology transfer is facilitated
 - Investment is undertaken by the private sector
 - Performance risk is borne by the private sector
 - Payments by municipal government is linked to the energy savings achieved.
 - Initiating green public transport facilities
 - LNG / CNG based buses, energy efficient sub way systems using PPP arrangements.
 - Municipal infrastructure to promote green modes of transport
 - Charging stations for electric vehicles
 - Promoting distributed renewable energy.
 - Municipal Waste to energy
 - Solar PV in public buildings
 - Shallow ground geo thermal for space heating

How Can Cities Partner with Private Sector to promote Energy Efficiency

- Establishing dedicated agency to promote energy efficiency in Industries and Buildings in partnership with private sector.
 - Promote technology transfer and dissemination
 - Coordinate regulatory interventions
 - Establishing an accurate and transparent mechanism for monitoring real time energy consumption within the city.
 - Providing fiscal incentives, logistic facilities and business development services to promising ESCO start ups.
 - Undertake mandatory energy audits in energy intensive industries to identify energy saving opportunities
 - Entering into binding agreements with key energy consuming enterprises to take management actions and technology improvements to achieve energy savings
 - Promoting capacity building and training to energy managers in energy intensive enterprises.
 - Undertake Measurement & Verifications (M&V) of energy savings achieved.

Role of Cities in Addressing Financing Barriers to Private Sector Investments in Energy Efficiency

- Establish Energy Conservation Fund through a municipal tax on energy consumption.
 - Provide investment subsidies to cover part of capital cost of energy efficiency investments.
 - Leverage commercial bank financing to energy efficiency through offering
 - Credit Guarantees
 - Performance guarantees on energy saving projects implemented by ESCOs.
 - Subordinate loans to commercial bank loans for risk mitigation
 - Equity investments in ESCOs and SPVs established for energy saving investments.
 - Encouraging commercial banks to provide financing to EE projects through green financing products

Conclusion

- Cities are responsible for more than 80% of energy consumption.
- National governments can set the macro level energy policies but the implementation of energy conservation initiatives have to be undertaken at provincial level.
- City governments have to partner with private sector for technology transfer, project implementation, M&V as well as mobilizing financing.
- City governments have to create the enabling environment for private sector participation in energy efficiency through transparent and consistent actions.