Energy Management and Int’l Information Sharing

The current approach of ClimateWorks
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Item 4.1
1. Energy Management to mitigate energy consumption in the Industrial Sector

2. Successes and limits of current information sharing programs

3. ClimateWorks’ approach to sharing of best practice programs
   • Collection of best practices
   • Capacity building at the local level

4. Possible role for EMAK and challenges ahead
Key policies are needed to drive industrial energy efficiency and GHG reductions.

Energy management is essential

Central Policies
- GHG or energy savings targets (tradable certificates or not)
- Voluntary public-private agreements

Complementary/Supporting Policies
- Fiscal incentives
- Mandatory/voluntary EM systems (incl. energy audits, energy conservation plans)
- Data collection
- MV&E obligations

Supporting Instruments
- Energy management or audit protocols, training & certification
- Technology inventory
- Financial instruments
- MV&E protocols
- Benchmarking manuals

Overall goals
- Design central policies (e.g., targets)
- Strengthen central policy programs
- Design complementary policies
- Strengthen complementary policies
- Cooperate with those designing supporting instruments (e.g., financial institutions, industry associations, etc.)
Continuous discussions need to happen between policy makers, energy managers and other EE stakeholders

Key policies

Central Policies

Complimentary/Supporting Policies

Supporting Instruments

Sharing of best practice information

- Policy makers (PM) to PM
- Policy makers to EM

- Fiscal incentives
- Voluntary / Mandatory Energy management systems
- MV&E obligations

- EM or audit protocols
- EM training & certification
- MV&E protocols

- Policy makers (PM) to PM
- Policy makers to EM
- EM to policy makers
- EM to EM

- Policy makers (PM) to PM
- Policy makers to EM
- EM to policy makers
- EM to EM
- EM to others (ex. banks)
- Others to EM (ex. trainers)

Need policies to encourage best EM practices (including MRV) ...

... but the success of industrial efficiency policies also depends on an appropriate dialogue with EM and training of EM
For energy managers (EM)
- Understand and participate in defining best practice
- Learn from other EM

For policy makers:
- Share experience on promoting EM schemes
- Learn about best practice
Examples of key EM international information sharing programs

Between policy makers
- GTZ, US AID in India
- ECCJ, Ademe, UK Carbon Trust in China
- US DOE in China and India

Lessons learnt
- Absence of support in some countries
- Not one size fits all

Between policy makers and EM
- No formal int’l information exchange programs

Between energy managers / auditors

*Information sharing*
- Association of Energy Engineers (AEE)
- UNIDO/UNEP Resource Efficient and Cleaner Production
- IAEMP

*Certification and training*
- Certified Energy Manager (AEE)
- Qualifying Technicians and Technical Trainers (GTZ with CIM)
- Train the trainers (UNIDO)
- ISO 50001 [PC 242]
- ManagEnergy or EUREM

- More regional / national EM networks than international sharing of BP
- Multiplicity of certification standards
Successes and lessons learnt from int’l information sharing programs

• National policy-makers should always take the lead on designing EM schemes
  • Local knowledge, local circumstances
  • Acting as “project managers” when receiving international best practice

• Success of EM schemes depends on:
  • Dialogue between policy makers and EMs on the ground, but difficult to export information sharing best practice models – not “one size fits all”
  • Training / certification programs need to evolve with policy agenda, yet changes are not uniform among countries as policy programs differ
ClimateWorks overview

Best Practice Networks

• Industry: Industrial Productivity Institute
• Transport: ICCT, ITDP
• Appliances: CLASP
• Power: RAP and LBNL
• Buildings: forthcoming

Regional Climate Foundations

• Energy Foundation (US)
• China Sustainable Energy Program (China)
• European Climate Foundation (EU)
• Shakti Sustainable Energy Foundation (India)
Value add of each network member

**Local grant-making**

**Role of the RCFs …**

- Shape and execute regional philanthropic strategy
  - Local political knowledge
  - Resource and project prioritization
  - Development of strong regional strategies

- Build local capacity
  - Assessment of local capacity gaps
  - Capacity building for local NGOs, government

- Direct swing capacity
  - Identification “windows of opportunity”
  - Delivery of rapid response resources

**International contracting**

**Role for BPNs …**

- Deliver on-call world-class technical expertise to decision-makers
  - Best practice advice on policies that work
  - Extensive data sets, distinctive research/tools, and on-call expertise

- Promote identification and sharing of knowledge, stimulating demand for expert services
  - Convening decision-makers
  - Proactive outreach
  - Identification of new Network members

- Enrich CW Network with cutting-edge sectoral perspectives
  - Dissemination of knowledge to inform RCF strategies
  - Provides Network access to rapid-response resources
**ROLE OF ENERGY MANAGEMENT IN TECHNICAL ASSISTANCE**

**Best practice examples**

- **Japan**
- **EU**
- **US**
- **UK**
- **Australia**
- **China**
- **India**
- **Other**

Inform, advise, assist Domestic “translation”

- **India**
- **China**
- **Europe**
- **US**

**Best practice needs**

**Industrial Productivity Institute: example of near term interventions**

- **Provide local governments a tool box to facilitate expansion of industrial efficiency policies:**
  - Technology inventory
  - Energy management best practices
  - EE benchmarking data collection

- **Help design fiscal policies that reward/penalize participants**

- **6 Party collaboration: RCFs industry and power program officers, Power BPN and local RCF grantees**
Considerations for EMAK

Opportunities for EMAK

1. Promoting the role and importance of energy managers
2. Documentation and dissemination of best practice information
3. Platform for energy managers and policy makers discussions

Challenges ahead...

Global network needed, yet

- Information exchange best used if tailored to architecture and design of national policies – “not one size fits all”
- Need to have relays on the ground to provide further capacity building (ex. training of trainers, MRV)
- Need to ensure that supporting instruments for EM are in place before considering mandatory EM schemes (ex. certification, MRV protocols)
If needed
The Industrial Productivity Institute and RCFs

**Best practice examples**

**Best practice needs**

*Capacity Building*

*Matching international best practice with local champions’ needs*

**Extended Best Practice Network**

**Best Practice Network (BPN)**

- BPN Staff:
  - China
  - India
  - Global

**External consultants**

- Independent consultants
- NGOs
- Financial institutions
- Research Institutes

**Regional Climate Foundation**

- RCF Staff
- External consultants / grantees
- Other NGOs/ researchers
- Former policy makers
- Industry representatives

**Decision-makers**

- Policy-makers
- Industry Managers
- Other

**Knowledge services**

Knowledge is shared throughout the extended best practice network
Value Proposition for the Industrial Productivity Institute

Services

1. Policy design assistance
2. Financial expertise
3. Technical information
4. Documentation and dissemination of best practice information

Common expertise

• Sector-specific target setting
• Fiscal policies
• Corporate best practice (energy mgt, audits)
• Inventory of best performing technologies
• Focus on:
  - Iron and steel, cement and aluminium sectors
  - Cross-sector technologies in more complex sectors

Best practice examples

Inform, advise, assist Domestic “translation”

Best practice needs