Summary of three EMAK workshops

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Workshop One

The first EMAK Workshop was held in January 26-27, 2010 in Paris featuring

- 15 presentations
- from 11 countries (China, Japan, Germany, India, Australia, Mexico, USA, Korea, South Africa and UK)
- attended by over 60 attendees from 25 countries.

Focus

The presentations provided insights into

- the energy management institutions and regulatory systems of various countries
- provided a learning experience for all participants with active discussions

Key Comments and Outcomes

Energy Management and measurement

- The importance of effective energy management in order to improve energy efficiency in industry was underlined by all participants

- In order to ensure effective energy management, it was noted that measurement and reporting of systems was crucial

Key Comments and Outcomes

Design of energy management systems

- Mandatory reporting systems (Japan, India, Korea),
- voluntary systems (Germany)
- hybrid systems (companies are required to report potential energy savings ie Australia),
- companies' reporting linked to tax benefits (UK)
- Mandatory hiring of energy managers (Japan, India, China, Korea)
- Certification through exams (Japan, India)

Key Comments and Outcomes

Sharing knowledge

- Qualifications of energy managers is critical – knowledge of energy management (technical), financing (management), etc.)

- Sharing knowledge on energy management :
  - organising companies into groups (Ekoprofit of Germany)
  - energy auditors, various toolkits (US)
  - award systems (Japan)
  - case studies (India, Japan)

Key Comments and Outcomes

Systems, schemes and organisations

- Focusing energy management projects within broader energy or environmental management frameworks to encourage a systems approach
- Developing national certification schemes and possible international certification
- Need to empower energy managers within the organisation: a regulatory framework could support the role of energy managers in the organization

A Possible Role for EMAK

Network of networks and building capacity

- Network of networks
  - policy makers with energy management practitioners
  - policy makers with policy makers
  - practitioners with practitioners
- Forum for broad information exchange
  - internet (portal site, webinars)
- Engage leaders of corporations and policy makers
- Assist with energy efficiency certification systems and in the training of energy managers
- Translations into appropriate languages

Workshop Two

The second EMAK Workshop was held on May 10, 2010 in Washington DC, USA.

The workshop featured

- 15 presentations
- from 8 countries/institutions (China, Japan, India, France, Australia, USA, Korea and Ireland)
- attended by around 60 attendees from 13 countries.

Focus

The presentations provided:

- insights into the energy management institutions and regulatory systems of various countries
- learning experience for all participants
- included one session focused solely on the role and development of ISO50001.

Key Comments and Outcomes

Drivers for change

- After Copenhagen, energy efficiency was seen as at the top of the list of actions that the global community can take to reduce emissions
- Industry was continually cited as a key implementer of this energy efficiency
- Need for a commitment to the implementation of energy efficiency results not the identification of more technical ideas

Key Comments and Outcomes

Management approaches and measurement

- Re-affirmed the need for a Plan-Do-See-Act cycle approach, with firm-wide energy management systems, targets, and third party verification

- NB: measurement of energy performance (a key element in the Japanese experience) was critical to the broader implementation of energy management

Key Comments and Outcomes

Legal frameworks and the business case

- The legal framework for successful management can be mandatory legislation
- Energy efficiency is of itself competitive and can be promoted in its own right.
- Difficult to mount the business case among practical operators
- Many industry participants commented that no project over a two year pay-back was seriously considered.
- CEO support is critical

Key Comments and Outcomes

Integrating energy management and dealing with risk

- Energy management should be integrated into broader management discussions
  - mainstream decision-making tools
  - finance and technical support
  - broad standards for non-specialists
- Government enables industry to minimise risk and could assist with benchmarking

Key Comments and Outcomes

ISO50001 approaches

- ISO is an approach that recognises that users can manage their energy but not necessarily politics or prices
- The growth of ISO50001 is subject to the capacity of organizations to absorb and implement new practices
- EMAK could assist with this

EMAK Workshop Three

Guilin City, China

November 15, 2011

- Many attendees from China
- Attendees from over ten other countries

Key Comments and Outcomes

China approaches

- Has already done a lot on energy efficiency targets
- Is open and active to participate in best practices and willing to share achievements
- Is creating its own national standards based on benchmarking
- Also willing to adopt standards and approaches from other countries

Key Comments and Outcomes

Other countries

- Korea: integrated, aligned to the broader national government approach and already delivering significant results
- Australia: the Government had required change and then firms discovered business reasons for introducing energy efficiency
- India: developed specific sectoral strategies based on analysis of individual opportunities

Key Comments and Outcomes

Other countries and verification discussion

- Japan: regulation, leadership by top management and crisis motivated Japan to focus on energy efficiency
- Verifying the savings made from energy efficiency is a critical step and needs to be focused on more urgently

Issues for EMAK

The Drivers for Energy Management

- Governments are setting focus on change
- Business drivers – growth, profit
- EE as the next largest resource
- Focus on largest users or costs
- Utility, network pricing / incentives
- Global and local environmental challenges
- New standards: ISO9000, 14000, 51000
- Product/technology development
- Financial crisis, recession, trade

Issues for EMAK

Substantive change

- Potential in growing energy intensive industries: mining, metals, cement, timber & paper, chemicals
- Process scale, complexity and human factors offer large EM potential
- Developing country productive sectors >50% of TCE
- EM techniques also work for commercial transport, generation
- Broad view of drivers – productivity, GHG

Issues for EMAK

Energy Management policy options

- (Mandatory?) energy saving targets
- ESCo – capacity and capability, finance
- Fiscal instruments & ES certificates
- Norms, targets and benchmarks
- Audits, surveys, data analysis
- Assessments, reporting, compliance

Issues for EMAK

Energy Management strategies in industry

- Company commitment
- Practical plans
- Leadership: people and organisation
- Data and evaluation,
- Decision making processes
- Implementation and monitoring
- Communication

Issues for EMAK

Key tasks: communications and capacity building

- Communications: Multi-language global portal with webinars etc
- Capacity building : training for energy managers technicians, consultants, governors, accountants, policy advisors, politicians
- Capacity building: Identify supply chain opportunities for EM

Issues for EMAK

Key tasks: guides

- Guides: Standards, systems, protocols for EM techniques
- Guides: Identify multiple benefits/returns from EM measures
- Guides: Technology options that work with EM ie SMEs
- Guides: EM process guides for industry; PRO, etc
- Guides: EM policy pathways for government: PAT, EEO, IAC, policy options, etc