

Third International Forum: Energy for Sustainable Development

**Capacity building for Energy Efficiency and Access to
Cleaner Energy in Central Asia and Neighbouring Regions**

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Sept 2012



International
Energy Agency

EE Opportunities in Central Asia

- **The EE opportunity in Central Asia**
- **Common challenges and opportunities**
Observations from July 2012 IEA workshop in
Kazakhstan
- **Practical suggestions that IEA could contribute expertise to in collaboration with governments, UN agencies, and other key stakeholders**

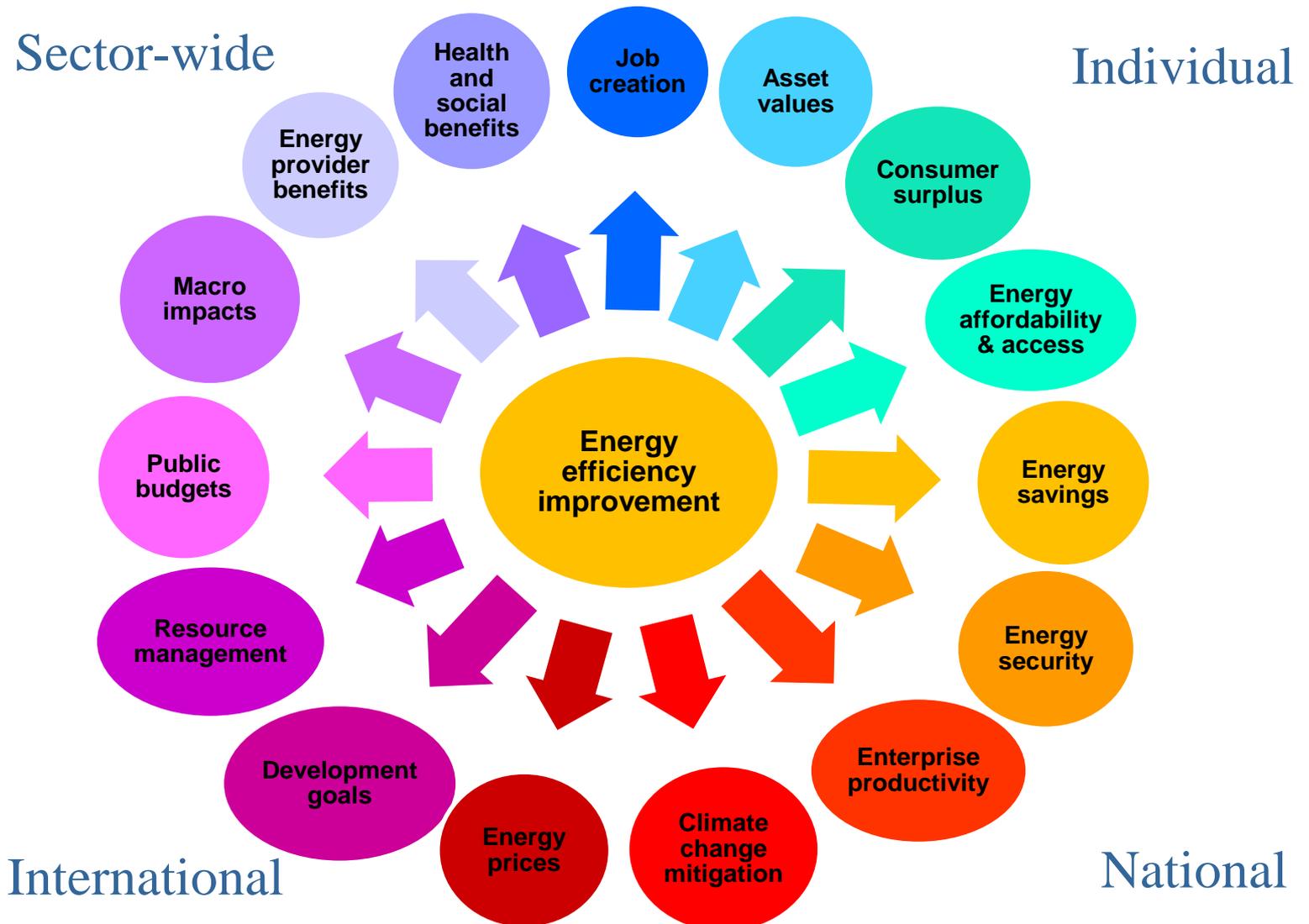
The EE opportunity in Central Asia

- Structural history of energy supply and demand in Central Asian countries is similar;
- WEO 2011 analysis; In 2008 Russia could have saved equal to 180 Bcm gas, equivalent to entire exports of gas for that year.
- EE in Russia is improving, but could still save enough gas in 2035 to increase exports by 1/3
- Energy development focus is on supply side

The development benefits from a greater emphasis on demand side measures are large;

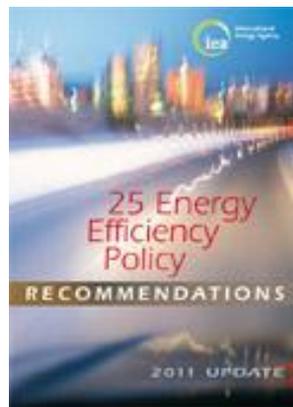
- service and output improvement is necessary for growth
- energy saved can be exported
- investments paid back through growth and cost savings

Multiple Outcome benefits of EE



EE Strategies and Policies

25 Energy Efficiency Recommendations across 7 Sectors



The 25EEPR provide a framework for EEU activities

Worldwide Implementation Now

http://www.iea.org/papers/2011/25recom_2011.pdf

Cross-sectoral



Buildings



Appliances and equipment



Lighting



Transport



Industry



Energy utilities



1. Market based practices for state energy operators

- Getting the price signals right to incentivise the correct actions in both supply and demand sides of markets
- State utilities have expertise, capital and operational management capability
- Integrated resource planning approaches to optimise demand side and supply side investments

PEPDEE Policies for Energy Provider Delivery of Energy Efficiency

2. District heating systems and energy efficiency

Strategic 'systems' approach;

1. Insulate homes,
2. Improve heaters, distribution and control in buildings
3. Improve distribution system operations and reliability; metering, reduce losses, lower heat demand, upgrade network
4. Improve efficiency and operational management of heat sources

<http://www.sustainablebuildingscentre.org/>

IEA District Heating implementation Agreement

3. Transport Efficiency

- **Low population density, sparse settlements and climatic extremes mean a reliance on heavier vehicles**
- **EE options include;**
 - **Fuel and road use measures**
 - **Vehicle fuel efficiency options**
 - **Fee-bate/registration options...**

Vehicle Fuel Economy Policy Pathway

MOMO model ability to assess regional options

Design of policy options

4. Multilevel Governance

- Identifying how central government, regional and local governments, utilities and industries can best allocate priorities and cooperate
- What are the range of EE policy options – which will work best for the region
 - Confers policy implementation authority
 - Builds political consensus
 - Enables implementation partnerships
 - Assigns responsibility and creates accountability;
 - Mobilizes resources
 - Establishes oversight arrangements.

Innovations in multilevel governance for Energy Efficiency

http://www.iea.org/papers/2010/gov_handbook.pdf

5. Indicators

- The priority is to develop effective analytical information and indicators to help prioritise efforts and understand where to start
- Sectoral indicators
- EE Progress and Potentials

Worldwide trends in Energy Use and Efficiency

http://www.iea.org/publications/freepublications/publication/Indicators_2008.pdf

Tracking industrial Energy Efficiency and CO₂ emissions

http://www.iea.org/textbase/nppdf/free/2007/tracking_emissions.pdf

Summing up....

- **Energy efficiency is the most cost effective way to improve economic competitiveness and energy security. The scope is large.**
- **IEA has good resources for the policies needed to address energy efficiency market failures;**
 1. **Identifying priorities – analysis indicators**
 2. **Identification and IMPLEMENTATION of objectives;**
 3. **Introducing market pricing to ensure cost recovery and enable much needed investments**
 4. **Mechanisms to monitor progress.**
- **IEA is keen to work with Central Asian countries and UN to advance EE in the region.**

ENERGY EFFICIENCY

Thank You

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