



COPENHAGEN CENTRE  
ON ENERGY EFFICIENCY  
SE4ALL EE HUB



## Opportunities for UNECE to Contribute to the SE4ALL Energy Efficiency Target

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UNECE Group of Experts on Energy Efficiency Meeting

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# Copenhagen Centre on Energy Efficiency (C2E2)

- 1. Global Champion on Energy Efficiency
  2. Analytical and Technical Support
  3. A Knowledge Platform and Network for Energy Efficiency

# Sustainable Energy for All

- SE4ALL a Multi-stakeholder partnership between governments, private sector, civil society
- Launched by UNSG in 2011 after 2 years of preparation with 3 interlinked objectives until 2030
  - Ensure universal access to modern energy services
  - Double share of renewable energy in global energy mix
  - **Double global rate of improvement in energy efficiency**



# SE4ALL EE Accelerator Platform

- Work program focus for the EE Committee.
- Display concrete transformational initiatives/instruments in support of the SE4ALL efficiency objective.
  - *Global Public-Private Alliance on Accelerating Energy Efficiency*
  - *Focus on the interphase between sector/technology initiatives, policy and consumption aspects (countries, cities, companies) and finance - in a phased approach.*
    - *Initial accelerators focus on lighting, appliances, buildings, district energy systems and transport*
    - *Umbrella approach with individual groups engaged on each topic, each group has an industry co-lead*
    - *Implemented in cooperation with governments, cities and major private consumers.*
  - *Umbrella approach to be presented at UN SG CC Summit - Sept 2014*
  - *Larger showcasing envisaged in Paris 2015.*

# Lighting and Appliance Accelerators

- Global transition to widely available efficient lighting solutions in all lighting sectors by 2030 could reduce electricity demand by some 30 %.
- An increasing global demand for appliances like air conditioners, refrigerators and televisions requires increased energy efficiency.

Country-level actions	City-level actions	Industry actions
<ul style="list-style-type: none"> <li>• Standard and labelling legislation/regulations</li> <li>• Harmonised test methods</li> <li>• Minimum energy performance standards</li> <li>• Energy rating labels</li> <li>• Endorsement labels</li> <li>• Monitoring, verification and enforcement</li> <li>• Rebates and incentives</li> <li>• environmentally sound management e.g. recycling, disposal</li> <li>• Education and awareness campaigns</li> </ul>	<ul style="list-style-type: none"> <li>• Rebates and incentives</li> <li>• City procurement policies</li> <li>• environmentally sound management e.g. recycling, disposal</li> <li>• Education and awareness campaigns</li> </ul>	<ul style="list-style-type: none"> <li>• Rebates and incentives</li> <li>• Innovation commitments e.g. high quality and green products</li> <li>• Commitment to affordability and marketing</li> <li>• environmentally sound management e.g. recycling, disposal</li> <li>• Education and awareness campaigns</li> </ul>

# Building Accelerator

- Policies, building design and technologies combined with behaviour change could deliver reductions in energy demand from new and existing buildings of over 50% compared to BAU.

Country-level actions	City-level actions	Industry actions
<ul style="list-style-type: none"> <li>• Energy reduction targets in the building sector</li> <li>• Building Codes</li> <li>• Supportive enabling legislation can support infrastructure investment</li> <li>• Incentives e.g. Tax relief</li> <li>• Mandatory disclosure of building performance</li> <li>• Minimum standards for new buildings</li> <li>• Regulating the retrofit and renovation of existing buildings</li> <li>• Financial support e.g. underwriting loans, revolving funds</li> <li>• Green procurement standards for public buildings</li> <li>• Retrofitting existing government buildings and leased space</li> <li>• Education and awareness campaigns</li> </ul>	<ul style="list-style-type: none"> <li>• Building codes</li> <li>• Enforce building codes.</li> <li>• Incentives e.g. Tax relief or EE construction/retrofits</li> <li>• Integrated policy roadmap</li> <li>• Energy reduction targets in the building sector</li> <li>• Minimum standards for new buildings</li> <li>• Retrofitting programs for existing buildings</li> <li>• Green procurement standards for public buildings</li> <li>• Education and awareness campaigns</li> <li>• Development planning e.g. zoning, density, orientation.</li> <li>• Priority approval processes for efficient buildings.</li> </ul>	<ul style="list-style-type: none"> <li>• Low interest and longer term loans</li> <li>• Demonstrate energy efficiency innovation in buildings</li> <li>• Education and awareness campaigns</li> <li>• Utility policies that decouple profits from volumetric sales.</li> <li>• Energy Service Companies (ESCOs)</li> </ul>

# District Energy Systems (DES) Accelerator

- Bringing more effective ways to distribute electricity as well as heating and cooling is estimated to deliver 80 to 90% efficiency gains relative to conventional separate generation of electricity and heat.

Country-level actions	City-level actions	Industry actions
<ul style="list-style-type: none"> <li>• National DES targets</li> <li>• Quantifying and promoting benefits of DES</li> <li>• Energy policies and programs that facilitate the deployment of district energy systems</li> </ul>	<ul style="list-style-type: none"> <li>• City DES targets</li> <li>• Dedicated individual/committee to promote DES</li> <li>• Energy mapping and infrastructure planning</li> <li>• Land use policies promoting DES</li> <li>• Quantifying and promoting benefits of DES</li> <li>• Interconnection policies</li> <li>• Promote local energy sources e.g. renewable energies, waste heat</li> <li>• Local resource and demand mapping</li> </ul>	<ul style="list-style-type: none"> <li>• Invest and finance DES systems</li> <li>• Education and awareness campaigns</li> <li>• Partnering city governments</li> <li>• New management skills (service quality)</li> </ul>

# Transport Accelerator

- Global fleet of vehicles is set to increase from 850 million today to some 3 billion by 2050 with most of increase in developing countries and transition economies – transport sector as a whole has highest growth of CO<sub>2</sub> emissions of any sector.

Country-level actions	City-level actions	Industry actions
<ul style="list-style-type: none"> <li>• Transport efficiency targets</li> <li>• Vehicle efficiency/emission standards</li> <li>• Fuel quality standards</li> <li>• Import regulation to control import of old inefficient vehicles</li> <li>• Labelling</li> <li>• Incentive schemes to retire old inefficient vehicles</li> <li>• removal of fuel subsidies</li> <li>• Preferential tax incentive for efficient vehicles</li> <li>• Incentive schemes to retire old inefficient vehicles</li> <li>• Improving inspection and maintenance</li> <li>• Education and raising awareness</li> <li>• Funding research and development</li> </ul>	<ul style="list-style-type: none"> <li>• low emission zones</li> <li>• Reduced parking fees for EE vehicles</li> <li>• Reduced fuel consumption targets</li> <li>• Improve public transport network including use of clean technologies</li> <li>• vehicle efficiency/emission standards</li> <li>• regulate the number of cars on roads</li> <li>• Improving inspection and maintenance</li> <li>• Education and raising awareness</li> </ul>	<ul style="list-style-type: none"> <li>• Commitment to technological innovation to improve vehicle efficiency</li> <li>• Education and raising awareness</li> <li>• Funding and prioritising research and development</li> </ul>



# Opportunities for UNECE in SE4ALL's EE Accelerators

- Participate and support the existing accelerators and contribute in the development of new accelerators.
- Provide leadership to build momentum across accelerators in UNECE region (countries, cities and industry).
- Jointly promote best practice and demonstration projects with C2E2.
- Consider if energy efficiency can be made an integral part of energy policies and programs.
- Support from European Bank for Reconstruction and Development (EBRD) for accelerators and have indicated they want to scale up energy efficiency investment in their region.