



SUSTAINABLE  
ENERGY FOR ALL

# **SUSTAINABLE ENERGY FOR ALL**

---

**SE4All: Global Energy Efficiency Accelerator**

**SE4All Global Forum on Energy Efficiency in Cities**

**Mohinder Gulati, Chief Operating Officer, Sustainable Energy for All**

**Tokyo, October 29-30, 2015**

# Sustainable Energy for ALL: 1 Goal & 3 Objectives

## Sustainable Energy for All by 2030



ENSURING  
*universal access*  
TO MODERN ENERGY  
SERVICES.



DOUBLING THE GLOBAL  
RATE OF IMPROVEMENT IN  
*energy efficiency.*



DOUBLING THE SHARE OF  
*renewable energy*  
IN THE GLOBAL  
ENERGY MIX.



# SDGs: World energy transition required by 2030



# EE work stream and the Overall SE4All Objectives

- Energy efficiency: one of the **three SE4All objectives** enshrined in **Sustainable Development Goals** (Goal 7.3)
- EE measures also help achieve the 2 other SE4All goals:
  - Enable existing and new infrastructure, (including RE) to reach more people and **enhance access to modern energy services**
  - An important component to be embedded in Country Level Actions
- The objectives set for **COP 21** are key enablers to achieve the 2030 SE4All goals
- In addition to reporting based on the **Global Tracking Framework**, EE partners are developing tools to measure their **bottom-up contribution** to the 2016-2020 objectives and linking these to 2030 goals



# Our activities are implemented all around the world



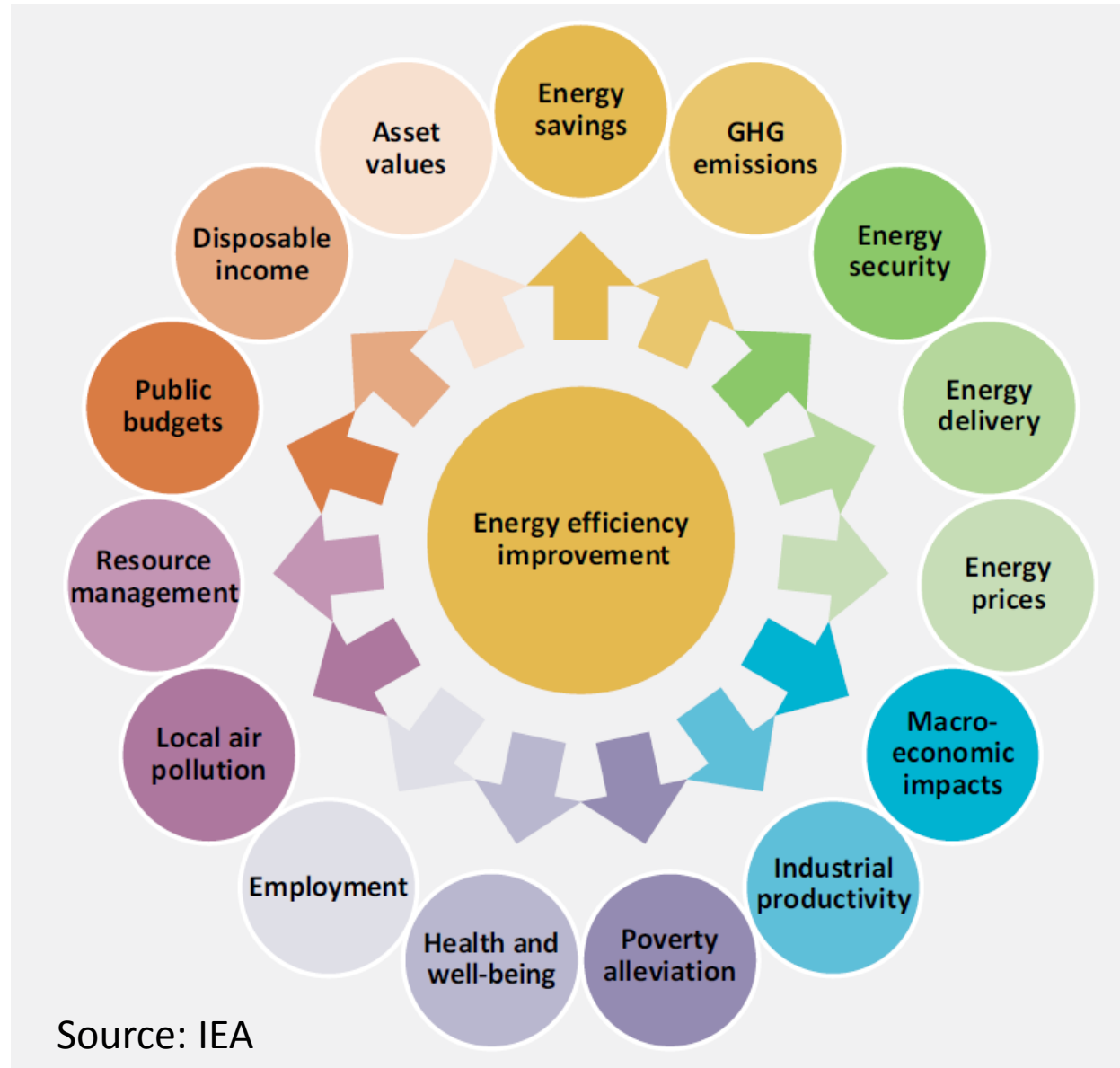


# Why is energy efficiency important?

- Provides a **triple rationale**: economic benefits (increased productivity, lower costs, net job creation); improvement of people's well-being; local and global environmental benefits (reduced emissions).
- Targeted measures such as those under **the Global Energy Efficiency Accelerator Platform** can:
  - **deliver 50 per cent of the emissions reductions required to put the world on a 2° C pathway by 2020.**
  - **reduce emissions by 1.5 Gt while generating \$250-325 billion in savings for consumers each year (UNEP).**
- A cumulative investment of \$8.2 trillion in energy efficiency is more than offset by fuel cost savings of \$10.6 trillion over the period 2012-2030, according to IEA's Efficient World Scenario.



# Energy Efficiency brings enormous benefits



# SE4All Global Energy Efficiency Accelerator Platform

- Leaders from more than **70 countries**, **30 cities** and dozens of corporations launched large-scale commitments on energy efficiency. Target: at least 100 jurisdictions by COP21.
- The Platform includes six initiatives: **vehicles, lighting, appliances, buildings, industry and district energy systems**. Additional initiatives: **power sector** and **finance**.
- Examples of **national and city governments** participating in the Platform.  
Chile and Nicaragua, Almaty and Astana (Kazakhstan), Cetinje (Montenegro), Jinan City (China), Leon (Mexico), Lima (Peru), Manila (Philippines), Rio de Janeiro (Brazil), Thimphu City (Bhutan), Ulan Bator (Mongolia), Warsaw (Poland), and the Iskandar Region of Malaysia, with ten municipalities. Complete list will be available for COP21 at [www.se4all.org](http://www.se4all.org)
- International organizations and financial institutions committing to help governments prepare road maps and investment and action plans. They include: the World Bank (ESMAP), IDB, UNDP, EBRD, ADB and Energy+ of Norway and others.





# Energy Efficiency Network

## Partners of the Global Energy Efficiency Accelerator Platform



# Energy Efficiency Accelerator Sectors

The Accelerator Platform was established to support specific sector-based energy efficiency accelerators

## Lighting

Global market transformation to efficient lighting



## Appliances & Equipment

Global market transformation to efficient appliances & equipment



## Vehicle Fuel Efficiency

Improve the fuel economy capacity of the global car fleet



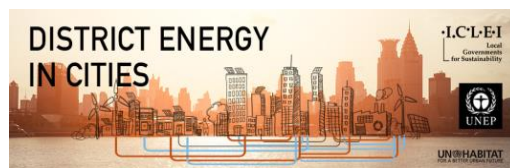
## Buildings

Promote sustainable building policies & practices worldwide



## District Energy

Support national & municipal governments to develop or scale-up district energy systems



## Industry

Implementing Energy Management Systems, technologies & practices



Power Sector Accelerator is under development



# Transportation Accelerator



- The Vehicle Fuel Efficiency Accelerator implemented by the **Global Fuel Economy Initiative** (GFEI)
- Goal is to double the EE of all new vehicles by 2030 and of all vehicles by 2050  
This would save more than 1 gigaton of CO<sub>2</sub>/year by 2025 and more than 2 gigatons by 2050
- GFEI is aiming at 100 countries participating by COP21.



# Lighting Efficiency Accelerator



en.lighten

**PHILIPS**



- The Lighting Accelerator implemented by **UNEP/GEF en.lighten partnership**
- Goal: to phase-out incandescent lamps by 2016  
This will save more than 2 terawatt hours in electricity-use, 440 ktonnes emissions of CO<sub>2</sub> and more than USD 270 million of electricity bill each year
- The Accelerator is aiming at 100 countries participating by COP21.



# Efficient Appliances Accelerator

- Implemented by the Global Partnership on Appliances and Equipment
- Goal: to reduce electricity consumption in air conditioners, refrigerators and fans

This will save 165 TWh & 54 million tonnes of GHG emission/year, saving more than USD 22 billion each year
- The Accelerator is aiming at 100 countries participating by COP21.



efficient appliances  
& equipment



# Building Efficiency Accelerator



WORLD  
RESOURCES  
INSTITUTE

- Facilitates collaborative, multi-stakeholder workshop to convene partners in each city.
- Provides governments with technical support leveraging best-in-class tools, databases and subject matter experts.
- Helps governments communicate and promote their commitments, calculate their baseline, report progress, and provide a platform for sharing experiences, challenges & best practices.
- International financial partners will provide funding to support policy development and demonstration project implementation.
- The Accelerator is aiming to significantly increase participation by COP21.





# District Energy Systems Accelerator



- Private sector partners include Danfoss, Grundfoss, Siemens, Vattenfall, Veolia, Climespace and Empower
- Their joint action on district energy systems can save up to 5 Mt of CO2 annually.
- The Accelerator is aiming to significantly increase participation by COP21.



# Industry Accelerator



Institute for  
**Industrial  
Productivity**

- The Goal: to facilitate the implementation of Energy Management Systems, technologies and practices in global industrial energy use.
- The Accelerator focuses on:
  - Large energy intensive industries, &
  - Energy intensive SMEs.
- Led by UNIDO, TERI & IIP
- The Accelerator is aiming to have 100 countries participate by COP21.



## SE4ALL's Goal for COP 21

Prior to COP21, SE4ALL is seeking EE and GHG emission-reduction commitments from:



100 jurisdiction (cities  
regions and countries)



100 banks



100 companies



# EE Accelerator Platform active in jurisdictions

The Global Energy Efficiency Accelerator Platform was established to promote the **objective of doubling the rate of energy efficiency improvement by 2030.**

The Platform **drives and supports action and commitments** by national and sub-national leaders at the country, city, state, regional, or business and sector level as well as by donors, funders and supporters of this initiative.

A **key deliverable** of the Platform in each jurisdiction will be **a roadmap** that describes the policies and projects that will be taken in order to achieve the energy efficiency improvements.

The roadmap will also be used by SE4ALL to **mobilize support from a global network** of experts, institutions and businesses participating to scale-up and facilitate **energy efficiency investments.**

# Energy Efficiency Accelerator Commitments

## **National, sub-national and city governments commitments:**

- Double the rate of EE improvement by 2030 in targeted sectors within their jurisdiction.
- Implement at least one enabling policy and one demonstration project to be announced at COP21 in Paris.
- Create a baseline of energy efficiency performance, agree to track and report annual progress, and share experiences and best practices.

## **Business, NGO and international organization commitments:**

- Facilitate collaborative, multi-stakeholder workshops to define and prioritize policy and project actions including government leadership, codes and standards, performance benchmarking and disclosure, third-party financing models and utility programs
- Provide technical support to governments to leverage best-in-class tools, databases and subject matter experts.
- International financial partners will provide funding to support policy development and demonstration project implementation



Jurisdictions will go through a phased process of identifying their engagement :

1. Commitment (Letter of intent, MoU)
2. Assessment
3. Development
4. Implementation,
5. Tracking/Reporting/Improvement





# City Engagement Process - Light Touch and Deep Dive

Light Touch



Targeting

Assessment

Development

Implementation

Deep Dive



# SE4ALL – engagement process

Two types of support by the Accelerator Platform:

**1) policy-level support (“light touch”)** which helps the city or region to identify energy efficiency priorities and to establish an Action Plan/road map; and

**1) an Action Plan/road map implementation support (“deep dive”).** support provided by the Accelerator’s conveners and the wider network of the SE4All Initiative, in collaboration with local actors. Partners include UN organisations (UNEP, UNIDO, and UNDP), development banks (World Bank, ADB, AfDB, EBRD, and IADB) as well private sector companies (Accenture, Danfoss, Dow Chemicals, Johnson Controls, Philips, and others).



# SE4ALL – engagement process

## 1. Commitment

- The city, region or country wanting to engage first signs a letter of intent to and ideally subsequently formulating a non-binding Aide-Mémoire with SE4All delineating “the ask”.
- SE4All engages with jurisdictions through a menu of policy options, and on key actions. The approach is based on the needs of the city or region, and the specific types of activities that the partnership can provide in each location.



# SE4ALL – engagement process

## 2. Assessment

SE4All involves its network of partners:

- To **undertake a high-level assessment**, using available tools and data sources, of local opportunities to improve energy efficiency in various sectors by introducing different policies and programs (TRACE by ESMAP)
- To **organize tailored presentations of best practices** (policies, programs, metrics and technical solutions) in sectors of interest to the jurisdiction, selected from the Platform menu of options, that address local opportunities in an integrated manner
- To **formulate recommendations for the jurisdiction** pursuing specific programs/projects along with referrals for technical support, financial assistance and local capacity building from SE4All partner organizations.



# SE4ALL – engagement process

## 3. Development

The jurisdiction takes the lead in

- Organising and facilitating a **multi-stakeholder workshop** focussed on specific sectors and areas identified by the assessment with resource persons from SE4All the respective platform partners
- This workshop assists in **preparing a preliminary plan of action** for developing and implementing the specific energy efficiency programs or projects and proposals for technical and financial assistance from SE4All Partner organisations

## 4. Implementation

- Access to state of the art technical solutions and best practice policy, program and project **expertise through the Energy Efficiency Accelerator Platform partners.**



## 5. Tracking/Reporting/Improvement

-Establishing an energy efficiency **performance baseline** and **tracking annual performance improvements**: cities, regions and countries create a baseline of energy efficiency performance record, and subsequently track and formulate annual progress reports, share experiences and best-practices with other governments.

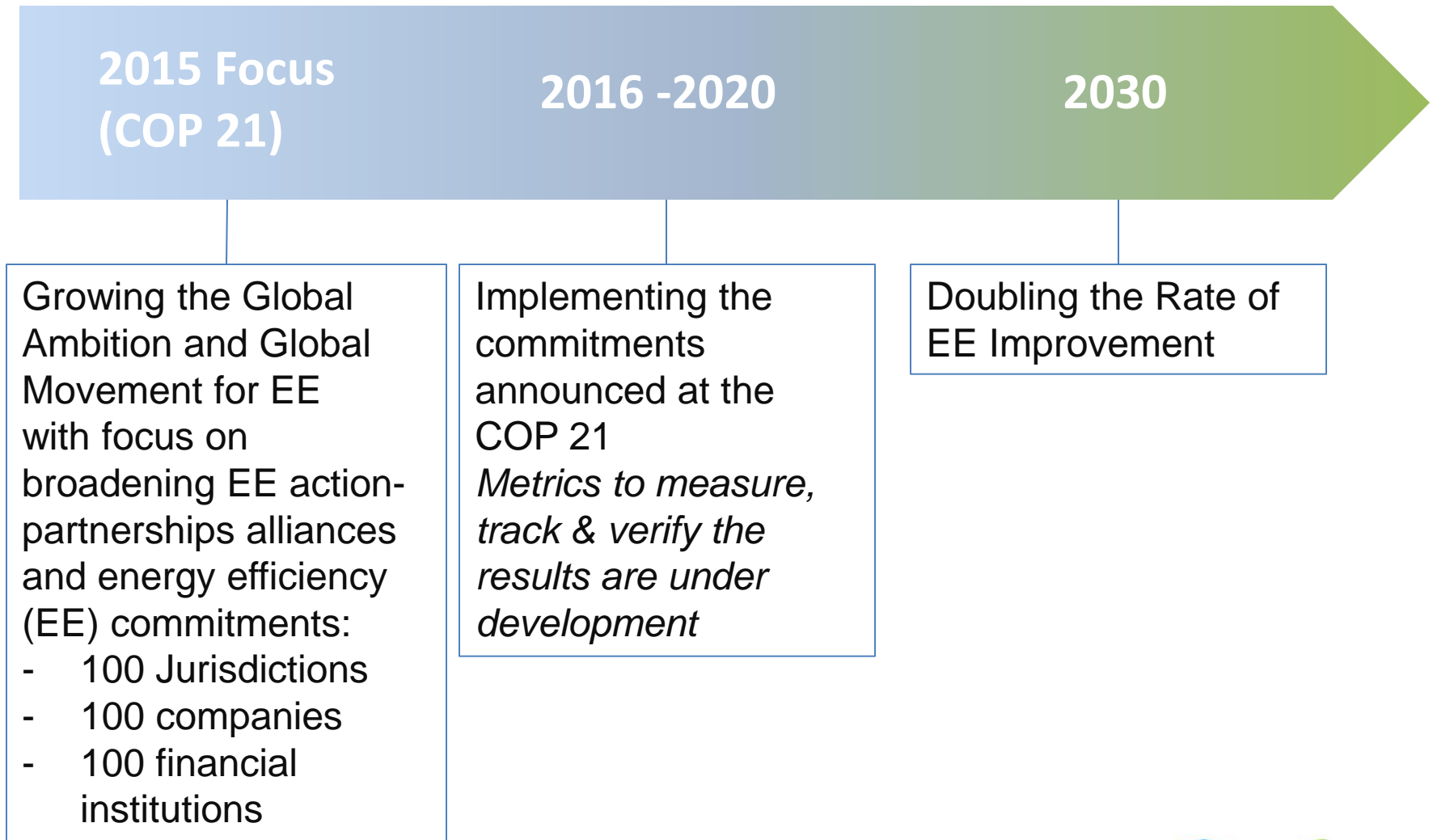
### ■ **Various tracking systems** of EE Accelerator Platform partners

- EU Covenant of Mayors
- ESMAP/TRACE
- WB Global Tracking Framework
- Businesses “We Commit “ campaign COP21  
(<http://www.se4all.org/tracking-progress/private-sector/>)





# SE4All Energy Efficiency- next phases



## For more information Energy Efficiency Team SE4All and the EE SE4All Copenhagen Hub

Luis Gomez-Echeverri, Senior Advisor  
SE4All Global Facilitation Team in Vienna  
[l.gomez-echeverri@se4all.org](mailto:l.gomez-echeverri@se4all.org)

Thibaud Voita , Energy Efficiency Officer  
SE4All Global Facilitation Team in Vienna  
[t.voita@se4all.org](mailto:t.voita@se4all.org)

Mark Lister, Head of the EE Accelerator Platform Secretariat  
Copenhagen Energy Efficiency Hub  
[mlis@dtu.dk](mailto:mlis@dtu.dk)

Monika Froehler, Programme and Communication Officer  
SE4All Global Facilitation Team in Vienna  
[m.froehler@se4all.org](mailto:m.froehler@se4all.org)



SUSTAINABLE  
ENERGY FOR ALL

# **SUSTAINABLE ENERGY FOR ALL**

---

**THANK YOU!**