



**REPORTING FORMAT FOR PARTNERS**

**Networking – Side – Training events**

**City Changer Room – Urban Library – Agora – One UN events**

**Deadline: 30 April 2014**

**Please send via email:** [wuf@unhabitat.org](mailto:wuf@unhabitat.org)

**Reporting Format for Partners**  
(Networking Events, Side Events, Training Events, City Changer Room, One UN Room, Urban Library, and Agora Room)

<b>Name of Reporter:</b>	Renata Mele
Event title/number:	Energy access, energy efficiency and resource distribution: improving the quality of life in slums of Latin America and Africa /76019
Date:	April 10 2014
Venue:	Medellin
Time:	13:30-14:30
Name of Organizing Institution(s):	Enel Foundation/Politecnico di Milano/ UN-Habitat
Country/City where Organizing Institution(s) is/are based:	Italy/Italy/Kenya
Approximate number of participants:	50

**Summary of the Event (max: 300 words):**

- *Brief background of the event, including overall objectives and purpose*

**Background**

Access to energy and energy use in slums is a critical issue deeply impacting the quality of life of dwellers. In particular:

- The number of people living in informal settlements around the world was estimated to be 830 million in 2010. Their access to energy and energy use is a very critical issue for socio-economical reasons and because of the impact on energy resources and climate change.
- Dwellers suffer the economic consequences of insufficient power for productive, income-generating activities and lack for other basic services such as health and education.
- Economic growth is linked with increased access to modern energy services.
- People in the lower income bracket generally use equipment which is less energy efficient, and so they pay more for the same end results.
- New challenges come from the rapid change of energy use patterns in informal settlements due to new technological advances and new perceived needs and changes in lifestyles.
- A comprehensive analysis on energy services, technologies, and users' behavior is needed to support a sustainable energy transition in informal settlements.

Nowadays, information on energy consumption in informal settlements is still unevenly distributed: countries like India, South Africa and Brazil have started to make it available, while in others (e.g. in Sub Saharan Africa, and South East Asia), such information is barely existing.





Considering this scenario, the speakers discussed the main issues related to the challenge of energy in informal settlements, presenting the research that Enel Foundation, in cooperation with UN-Habitat and Politecnico di Milano, is developing on inequalities in energy use and energy efficiency in selected informal settlements of Lima and Lagos. From the discussion emerged the main expected results: recommendations on appropriate energy services, interventions to improve the quality of life of dwellers and for and reducing inequalities.

- *Relevant Focus Area: URBAN BASIC SERVICES; HOUSING & SLUM UPGRADING*

### **Summary of the Discussion (max: total 500 words):**

#### 1. Outline of the discussion/debates

The panel discussion was attended by: Renata Mele (Enel Foundation), Vincent Kitio (UN-Habitat), Federico Butera (Politecnico di Milano), Diana Jimenez (Codensa S.A. ESP) and Chris Kennedy (University of Toronto).

**Renata Mele** (Enel Foundation) briefly exposed the Enel Foundation's mission and focused on the role of energy as key element of sustainable development of cities. Cities have always been the engine of development, but now their development model needs to be rethought. Urbanization has important issues to be solved: e.g. competition between different resources, security, poverty, and pollution. The key message is that “*sustainability is the key for an effective urban development*”. It is therefore urgent to remove inequalities that lead to the creation of informal settlements where people lack of basic elements such as water, energy and healthcare facilities. The eradication of urban poverty, Mele argued, must be based on three pillars: (i) universal access to energy, (ii) energy efficiency and (iii) energy security.

**Vincent Kitio** (UN-Habitat) presented the position of UN-Habitat on energy issues in informal settlements: sustainable development is possible only by ensuring access to energy for all sections of the population. Kitio also presented some of the activities carried out worldwide by UN-Habitat (such as solar power stations for charging electrical equipment), and spoke about the importance of research to gather information on the conditions of the inhabitants of informal settlements. The key message launched by Kitio is “*Knowledge is power*”.

**Federico Butera** (Politecnico di Milano) exposed the figures involved in the challenges of urbanization: about 900 million people live in slums and over 1.3 billion people haven't access to reliable sources of electricity. Moreover, despite the number of slums having decreased in recent years, the number of informal settlements dwellers is increasing. Butera described the research “*Analysis of Energy consumption and Energy efficiency in informal settlements of developing countries*”, jointly developed by Enel Foundation, Politecnico di Milano and UN-Habitat. The research aims to: investigate the access to energy sources, implement energy efficiency and use of renewable energy and help the





improvement of life quality in the informal settlements. The key point is that *the research investigates a wide range of aspects related to energy efficiency and energy use*, and collects data adopting an *innovative methodology* based on interviews directed to slum residents.

**Diana Jimenez** (Codensa S.A.) focused on the activities that Enel Group develops in Colombia. In particular, the growing demand for access to energy in cities must deal with two issues: (i) sustainability and (ii) efficient use of resources. Jimenez identified three key pillars identified for action: (i) *smart grids*, (ii) *smart meters installed in homes*, (iii) *energy efficiency of the built environment*. She concluded by briefly describing the major projects of Enel Group on smart cities in Latin America (Buzios and Santiago).

**Chris Kennedy** (University of Toronto) spoke about how the urban metabolism can be an instrument for the measurement and analysis of inequality in resources distribution in urban areas.

2. Major emerging issues and position documents/declarations towards:

- *Habitat III*
- *POST2015*
- *A New Urban Agenda*

The main positions emerged during the discussion are the following:

- 1) Sustainability means development, not growth. We need a holistic perspective for the city.
- 2) Sustainable development means a sustainable and affordable access to electricity for all the population.
- 3) Knowledge is power: It is important to study, understand, and measure the relationship between informal settlements dwellers and energy.
- 4) Energy efficiency of the built environment is a key issue for reducing energy poverty.
- 5) Intelligent infrastructures are an important enabling factor for access to sustainable energy for all.
- 6) The analysis of energy and material flows in cities is an important method for assessing inequalities in resource distribution.

3. Recommendations made during the discussion

*(e.g. policy direction, good/best practices, resource mobilization, innovative funding mechanism, etc.)*

Recommendations and best practices will be outlined at the end of the research project.





4. Building partnerships, network and synergies with UN-Habitat  
(e.g. agreements or Memorandum of Understanding committed/signed, amounts and number of pledged contributions and partnerships/networks, etc.)

UN-Habitat is partner of the research.

#### **Detail Information of Speakers/Presenters/Moderators:**

Full name (Ms):	Renata Mele
Nationality:	Italian
Organization/Institution:	Enel Foundation
Time:	13:30
Position:	Head of sustainable development and innovation research area
Contact address (Email):	renata.mele@enelfoundation.org

Full name (Mr):	Vincent Kitio
Nationality:	Cameroun
Organization/Institution:	UN-Habitat
Time:	13:40
Position:	Chief of urban energy unit
Contact address (Email):	vincent.kitio@unhabitat.org

Full name (Mr):	Federico Butera
Nationality:	Italy
Organization/Institution:	Politecnico di Milano
Time:	13:50
Position:	Full Professor
Contact address (Email):	<a href="mailto:febutera@gmail.com">febutera@gmail.com</a>

Full name (Ms):	Diana Marcela Jimenez Rodriguez
Nationality:	Colombia
Organization/Institution:	Endesa Colombia S.A.
Time:	14:00
Position:	Head of Business Development
Contact address (Email):	djimenez@endesacolombia.com.co

Full name (Mr):	Christopher Kennedy
Nationality:	Canada
Organization/Institution:	University of Toronto
Time:	14:10
Position:	Full Professor
Contact address (Email):	christopher.kennedy@utoronto.ca





## **UN-Habitat Thematic areas**

All events are identified by UN-Habitat priority substantive areas as below.

### **URBAN LAND, LEGISLATION & GOVERNANCE**

*Land & GLTN, Urban Legislation, Urban and Community Management & Governance, Safety*

### **URBAN PLANNING & DESIGN**

*Regional & Metropolitan Planning, City Extensions & Enlargements, Market Town & Intermediate City Planning*

### **URBAN ECONOMY**

*Urban & Municipal Finance, Urban Productivity, Youth and Job Creation*

### **URBAN BASIC SERVICES**

*Water & Sanitation, Urban Energy, Urban Mobility, Urban Waste Management*

### **HOUSING & SLUM UPGRADING**

*Housing, Slum Upgrading, Shelter Rehabilitation*

### **RISK REDUCTION & REHABILITATION**

*Urban Risk Reduction, Infrastructure Rehabilitation, Climate Change Mitigation & Adaptation, Resilience*

### **RESEARCH & CAPACITY DEVELOPMENT**

*Global Urban Observatory, Flagship Reports, Capacity Development*

*Cross-cutting issues:*

**GENDER**

**YOUTH**

**HUMAN RIGHTS**

