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Host Partners







الإمارات العربية المتحدة وزارة المخارجييسة



Habitat III Thematic Meeting on "Sustainable Energy and Cities" Abu Dhabi, 20 January 2016 CONTEXT AND DECLARATION

INTRODUCTION

Sustainable energy must be a core focus of the New Urban Agenda to be adopted at the Habitat III Conference in Quito in October 2016. Cities today represent over 70% of global energy consumption and a roughly equivalent share of energy-related CO₂ emissions; they are also home to millions of urban poor who lack access to basic energy services. Affordable, reliable, sustainable and modern energy in cities will therefore be essential for the realization of both the Paris climate agreement and Agenda 2030's Sustainable Development Goals (SDGs).

Cities moreover have an unprecedented opportunity to transform, decarbonize, and enhance the resilience of their energy production, supply, and use. Cost and business model breakthroughs have made renewable energy and energy efficiency technologies not only the environmental choice, but a financially attractive possibility for a wide and growing variety of urban stakeholders. Prices of solar photovoltaic devices, for instance, have declined 80% in the last five years. These new choices and cost-effectiveness stand out as one of the most marked changes in the urban landscape since Habitat II.

To address this opportunity, the United Arab Emirates, the International Renewable Energy Agency (IRENA), and the Habitat III Secretariat hosted the Habitat III Thematic Meeting on "Sustainable Energy and Cities" on 20 January 2016, during Abu Dhabi Sustainability Week, the world's largest annual gathering on clean energy. Ministers, national and subnational government officials, private sector representatives, and other stakeholders came together to articulate how the New Urban Agenda can accelerate the uptake of sustainable energy solutions and align with the landmark climate and development goals that the international community has set for itself.

Their recommendations on actions were compiled in the form of a declaration, finalized by an Advisory Group specially set up for this Thematic Meeting and composed of members representing all main stakeholders groups. The Abu Dhabi Declaration serves as an official input into the preparations of the draft zero outcome document of the New Urban Agenda. For context, the Abu Dhabi Declaration is preceded by a summary background.

CONTEXT FOR SUSTAINABLE ENERGY IN CITIES

The Thematic Meeting took place against the backdrop of the Paris agreement on climate change and the adoption of Agenda 2030. COP21 establishes a universal vision for mitigating global emissions and the imperative of decarbonizing the economy, while sustainable energy has been enshrined as SDG 7, as well as indirectly in other SDGs, such as SDG 13 on climate change. The Thematic Meeting forms a critical link between Habitat III, UNFCCC processes, and the Sustainable Development Goals and can facilitate a thematic alignment and achievement of objectives defined at these global events.

Numerous cities around the world are implementing energy measures to meet the ambition set forth in the Paris Agreement and 2030 Agenda; moreover, they can make both short and long-term economic gains by doing so. Evidence shows that sustainable energy is cheaper than alternatives in a large and rapidly growing number of countries and contexts, even before accounting for externalities. On this basis, renewables are now the dominant technology for new power generation additions — a shift unforeseen even recently, let alone at Habitat II. When other potential benefits — such as better health through reduced pollution, poverty alleviation, job creation, gender equality, enhanced access to

water and food, reduction of waste, less traffic, and supply security — are accounted for, the case for sustainable energy in cities is even more compelling. With costs for renewable energy technologies projected to continue declining, the business case for deployment will persist well beyond the Quito Conference.

The portfolio of sustainable energy solutions is expanding too, on both the supply and demand side. Distributed electricity generation will become a key feature of new and existing cities, complementing sustainable utility-scale power plants, which are often outside cities. Cogeneration and district energy networks also provide the flexibility and storage to integrate an increasing share of renewables into the energy mix, while simultaneously improving energy efficiency through demand aggregation, increased scale of production sources and use of waste heat. Smart grids are enabling major energy efficiency and resilience gains, and electric transport, when based on renewable power, can make a sizeable dent in the carbon footprint of the urban transport sector. In numerous developing country cities, access to cleaner fuels and efficient equipment for cooking and heating households, currently still largely biomass-based, would address multiple development challenges such as indoor and outdoor pollution. Accelerating energy efficiency improvements in all sectors of the economy has multiple development benefits, and is a cornerstone of meeting climate targets. New technologies, business models, and policy approaches are also turning unavoidable waste into energy (including surplus and low-grade wasted heat from city systems and industry), and better managing the nexus among other resources like water.

Local governments — when given appropriate responsibilities — are well-placed to encourage, enable, measure and regulate sustainable energy, as well as inform the decisions on deployment options, including adaptation to, and anticipation of, new technologies and changing energy requirements. Even for cities that do not directly control power generation, they may control local infrastructure and codes that can drive clean energy in end-use sectors, such as buildings, industry, transport, waste, or sanitation. Municipalities can also optimize land-use patterns to increase the feasibility of energy solutions. As major purchasers of energy, cities additionally can preferentially procure sustainable energy, further stimulating investment.

Important challenges remain in the form of market barriers, inappropriate policy frameworks, lack of empowerment of cities to manage energy, and financing gaps, as well as limited capacity for planning and implementation. This is particularly the case in poor and vulnerable communities and Least Developed Countries and Small Island Developing States, where citizens disproportionately lack access to modern energy services. The case for poverty alleviation in this context is compelling. Improved access to sustainable energy sources for cooking, heating and powering devices represents one of the swiftest ways to improve health, economic potential, and human dignity.

ABU DHABI DECLARATION ON SUSTAINABLE ENERGY AND CITIES Abu Dhabi — 20 January 2016

We, the representatives of national and sub-national governments, international organizations, the private sector, non-government organizations, academia, and civil society, participating in the **Habitat III Thematic Meeting on "Sustainable Energy and Cities,"** held on 20 January 2016, during Abu Dhabi Sustainability Week,

- Recommend that Habitat III establish sustainable energy as an integral part of the New Urban Agenda.
- Recognize the importance of a holistic, system-wide, pro-poor perspective and of further integration of sustainable energy considerations in city planning and management, including through use of performance metrics for energy production and consumption in zoning and land-use planning, permits, infrastructure, and transport decisions.
- Also recognize the importance of developing a nexus approach in the urban context, such as in the integrated
 management of energy, water, waste, transport, and food sectors to improve efficiencies, access, and carbon
 footprints.
- Acknowledge the need for closer cooperation among cities, utilities, and national and sub-national governments to
 ensure that sustainable energy goals are achieved expeditiously and cost-effectively.
- Highlight that the following actions provide examples of effective ways to pursue sustainable energy objectives at the local level that can be endorsed by the New Urban Agenda:
 - Promotion of/support to city-level renewable energy, energy efficiency, and energy access targets for all sectors (heat/cool, transport and power) that contribute to meeting SDG7 aspirations and targets contained in Intended Nationally Determined Contributions (INDC);
 - Development of integrated, city-scale energy and emissions plans incorporating transport, buildings, generation, heating and cooling, waste heat, and solid and liquid waste;
 - Introduction of dedicated policy and regulatory frameworks to enable the deployment of urban energy solutions, such as grid connection regulations that permit solar rooftop and co-generation systems to feed into central or local energy grids, including for informal housing;
 - Introduction of solar water heating requirements:
 - Establishment of measures such as minimum energy use targets or heat tariffs that reflect the cost of connection and the degree to which supply is guaranteed, in order to provide an enabling environment for waste heat to useful energy;
 - Establishment of a protocol to map/identify major waste heat sources and high heat and cool demand in cities, together with the development of heat and cool city plans;
 - Establishment of mandatory and enforced disposal fees for municipal solid waste, in order to reduce waste and drive waste-to-energy solutions for non-recyclable materials;

- Enactment of mandatory minimum energy performance standards, ratings and labels for energy efficiency in buildings, equipment, and appliances, especially lighting, heating and air-conditioning units, to reduce energy consumption;
- Enactment of energy efficiency measures in buildings that take into account efficiency in energy supply, and target the reduction of fossil primary energy, such as through the promotion of building integrated renewables;
- Scaling the use of non-fossil fuel based transport, such as renewable energy-based public transport and electric vehicles, as well as increased use of other forms of eco-mobility and non-motorized transport;
- Use of planning measures to improve density, compactness and street connectivity in cities in support of efficient provision of energy and transport services;
- Establishment of district-level strategies, such as the combination of building-related energy efficiency improvements (heating systems, insulation), decentralized energy production (solar, wind, geothermal, biomass, hydro, process or waste heat from industry, commerce and households) and system efficiency and large-scale renewables integration through district heating and cooling networks (including cogeneration, waste heat, large scale renewables, and thermal storage);
- Establishment of cross-sectoral working groups composed of urban planners, community representatives and energy providers to work on strategies for improving access to sustainable energy in the city and in lower-income neighbourhoods;
- Consideration of the impacts of energy interventions on social issues such as inequality, poverty, environmental justice, and access to services;
- Enactment of public-private partnership frameworks, in order to increase financial resources and expertise for sustainable energy infrastructure and services;
- Enactment of energy pricing regimes that discourage wasteful use, create a level playing field for sustainable energy technologies, shift consumption to periods with highest availability of affordable sustainable energy, and guard against negative impacts on low-income consumers;
- Use of protocols and accounting systems that illustrate both life-cycle costs and the co-benefits of different energy choices for outcomes in public and environmental health, economic development, increased resilience, and others;
- Enactment of sustainable energy public procurement policies by local governments, in order to reduce environmental and carbon footprints, and to foster market growth
- Establishment of city-wide strategies to improve resilience of the local energy system, including increased use of local resources, local energy storage, and distributed power production capable of providing emergency back-up power and heat to vital buildings such as hospitals and emergency shelters.
- Encourage national, regional, and international networks and partnerships between and with cities, as well as between large cities and their surrounding regions, to advance sustainable energy solutions.
- Encourage national governments to establish clear planning guidance and regulations that provide local governments with a mandate to act on energy, for example in the areas of energy master planning and mapping, energy service provision, and building codes.

- Recognize the urgent need for the introduction of innovative financing approaches, such as city-owned revolving funds, with a focus on de-risking private investment, including not only financing structures, but also models of ownership and governance and enhanced capacity of city officials to design, execute, monitor, and report on energy programmes.
- Encourage consideration of improving cities' authority and capacity to take and repay loans, or access other sources
 of finance, for energy infrastructure and programmes.
- Encourage governments to "mainstream" sustainable energy investment objectives in existing national development banks and publicly-capitalized Green Investment Banks.
- Call upon the development community to support the deployment of sustainable energy in developing country cities, especially with a view to facilitating private investment, while pursuing sustainable development.
- Call also for commitments to capacity-building and technical assistance, especially in developing countries, as a key element of sustainable urban energy solutions.
- Recommend further commitments to take non-technological measures supporting behavior shifts, such as knowledge-sharing and public information campaigns, and, further, we recognize the important role of community engagement and education to understand issues of climate change and energy transition.
- Emphasize the critical need for commitments to incorporate the gender dimension of sustainable energy in the urban planning and implementation of sustainable energy, including through such measures as the reporting of gender-disaggregated data on access to energy and finance for energy, as well as employment in the energy sector.
- Commit to promote the principles and actions outlined in this Declaration in the context of the upcoming formulation of the New Urban Agenda at the Habitat III Conference in Quito 2016.