



AMBITIOUS CITY PROMISES

CiBiX Ideator Insights Report: City of Jakarta

City-business collaboration for urban energy systems

4 December 2018 - City of Jakarta, Indonesia

Collaboration with the private sector on low emission development for urban energy systems.

Jakarta has committed to developing a low emission development strategy based on robust stakeholder engagement from citizens and the private sector through German Ministry of Environment (BMU) funded Ambitious City Promises (ACP) project via the International Climate Initiative (IKI) program. Through the ACP needs based assessment, low-carbon energy emerged as a high-priority sector for the city and is already a focal point of the city's sustainability planning.

The Capital Region of Jakarta (DKI Jakarta) has set a target to reduce greenhouse gas emissions by 30% by 2030. To achieve this goal, the city sees potential in collaboration opportunities that expand action on renewable energy and energy efficient investment. To explore these opportunities further, DKI Jakarta led a CiBiX (City-Business Collaboration Accelerator) Ideator workshop with diverse business stakeholders, which included renewable energy, green building, waste-to-energy and transportation experts. The workshop enabled DKI Jakarta's Environment Department and business participants to share their experiences and perspectives on how to achieve a mutually beneficial low emission energy future in Jakarta.

Key learnings and next steps from the CiBiX workshop are presented below. For further information please contact: ICLEI – Local Governments for Sustainability at city-business@iclei.org.

REALITY CHECK

On the way to achieving substantial reduction of greenhouse gas emissions, the DKI Jakarta has developed a robust strategy that sets ambitious goals and promotes green benefits for government, the private sector and citizens. This strategy, Local Action Plan for Greenhouse Gas Emissions Reduction (RAD-GRK, Governor Regulation 131/2012), mirrors the national commitment to decrease CO₂ emissions by 29% by 2030 in line with the Paris Agreement. The City's low emission strategy includes substantial focus on energy saving, transitioning to renewable energy and sustainable energy consumption by design.

However, despite a clear commitment to seek comprehensive solutions that substantially reduces carbon emissions at the local level, there is still a clear indication that action on energy saving and renewables needs to increase in order to meet the goal of 30% renewables in the city's 2030 energy mix. DKI Jakarta acknowledges that taking future steps to drive the implementation of the strategy requires improved data-collection for policy making. Moreover, although the city is committed to transform 30% of public buildings into green buildings with solar amenities, the progress has been slow due to a lack of available funding.

DKI Jakarta has also emphasized the need for engagement and collaboration with a wide stakeholder community to increase action in the following areas:

Scaling Solar Energy – DKI Jakarta is focused on exploring the potential of solar power as the primary renewable energy source. In 2018 the city government tested 100 locations for installing solar rooftops on educational buildings in Jakarta and plans to establish 22 solar power plants in DKI Jakarta in 2019.

Green Building for Greater Energy Efficiency - With industrial and residential emissions accounting for largest shares of GHG emissions in Jakarta (over 50%), the DKI government has focused on promoting the concept of green building for both private and public buildings.

Generating Energy from Waste – More than 6,000 tons of rubbish is produced daily in Jakarta before being transported to the final dumping site in Bekasi, east of the capital city. At present, the DKI Jakarta's government has been exploring the potential of waste-to-energy as a viable alternative to the current landfill system.

Enabling E-mobility – Tackling excessive energy consumption in Jakarta requires improving the energy-use of urban transportation. DKI Jakarta's has been actively exploring and promoting electric vehicles as a means of transportation. However, to achieve the current target of 70% electric vehicles in Jakarta by 2050, further planning is needed on which energy sources will power this shift.

To improve progress on the ambitious goals, set by RAD-GRK, the government of DKI Jakarta is looking to collaborate with the private sector on issues of energy-saving, sustainable energy generation and consumption. Finding a solution to intensive energy consumption and high levels of greenhouse gas emissions could take various forms of public-private cooperation. Therefore, exploration of opportunities such as; installing solar panels on public and private buildings, retrofitting the existing building stock, building waste-to-energy power plants, as well as introducing electric vehicles, installing sustainably-powered backup power generators and raising awareness about energy-saving practices, all require serious consideration.

BARRIERS AND OPPORTUNITIES

Pro-active Project Involvement on Solar Power

Increasing solar energy generation capacities, in particular rooftop solar is a central pillar of the DKI Jakarta's Action Plan. However, solar projects including the testing, installation and utilization of technologies are not yet a fully scaled and accessible solution. Both the city and private sector feel that progress has been slow and that renewed commitment and action is now needed to speed-up the shift towards renewables. Closer collaboration between the city and businesses as well as the central government and international investors is needed to attract the necessary funding and expand infrastructure projects such as the Thousand Islands RE initiative.

Dealing with Legacy Infrastructure and Buildings

DKI Jakarta's government's 2012 Action Plan contains policies for retrofitting public buildings and large-scale private buildings, as well as sets standards for new developments. Introducing the Grand Design of Green Building Jakarta target, the city expects to reduce CO2 emissions, water and energy consumption in residential and commercial buildings by 30%. However, the issue of transforming existing buildings (a vast majority of Jakarta's building stock) into green buildings still remains. At present, high costs, a lack of regulation and policy enforcement inhibit the transformation of existing smaller public and private buildings into green buildings. To unlock investment and promote the renovation of existing building stock, close collaboration with the private sector can help to identify ways to expand green building policies, regulation and incentives so that more buildings can be retrofitted with energy saving measures.

Developing Skills for Energy Efficiency

Skills and human capital are a vital part of successful energy efficiency plans and green building investments. Private sector representatives clearly stated that a skills shortage in this field presents a major challenge. As part of their low emission development strategy, DKI Jakarta provides energy efficiency training to public officials who work in renovated public buildings. However, energy-use data indicate that poor energy consumption practices are still persistent.

During the workshop, DKI Jakarta and businesses discussed ideas on how to communicate and incentivize energy saving behavior in workplaces and at home. Both parties agreed that there is considerable scope for additional investment in skills training for jobs related to green building management and renewable energy operations and maintenance. A potential idea was for DKI Jakarta and companies to set up partnerships that pool experience, resources and training material on sustainable energy use and management. An example resource would be the experience of the Pondok Indah Hospital in DKI Jakarta, which encourages employees to participate in an energy-saving competition. The learning from this initiative holds valuable insights in how to cultivate energy saving practices within an organization. If such practices are expanded, it could provide substantial benefits for private companies and public sector institutions alike.

Aligning Renewable Energy and Transportation

One of the biggest opportunities to reduce CO2 emissions, discussed by workshop participants is the opportunity to transition public transport infrastructure to run on renewable energy. Train rails, equipped with solar panels and solar-powered public charging facilities could open up opportunities for investment and increase sustainable energy infrastructure in Jakarta. To achieve this, collaboration between the transport, energy, and environmental city departments as well as energy and mobility sector companies needs strengthening.

Energy Efficient Public Lighting

City-business collaboration on public lighting holds great potential for reducing carbon emissions. According to private sector representatives, the conventional car batteries that are being used in Jakarta's public lighting bear an immense environmental cost. Businesses see a big opportunity in switching existing batteries to lithium batteries. An additional benefit of the partnership opportunity would be improved maintenance of public lighting infrastructure.

Remaining Challenges

Low Emission Back-up Power Generation

The sustainability of back-up power solutions is often overlooked in sustainable energy planning. A vast majority of buildings in Jakarta still rely on fuel-powered back-up generators. During the workshop a potential project partnership on promoting a shift to more sustainable gas-powered generators was introduced. This complements the Jakarta's green buildings strategy and will decrease energy emissions from the use of back-up power.

Data Collection for Policy Evaluation

The success of Jakarta's low emission strategy requires accurate and consistent data collection. Poor data can lead to misinformed decisions. DKI Jakarta should consider identifying public-private collaboration opportunities that enhance the measurement and sharing of energy consumption and CO2 emissions. Such partnerships will improve awareness of both city and business stakeholders and help to identify high-impact actions and steer policy priorities.

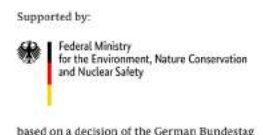


MOVING LOW EMISSION DEVELOPMENT FORWARD

In 2019 the DKI Jakarta government is committed to focus on further supporting construction, infrastructure and waste management transition to achieve its goals in low carbon development. The 2012 Action Plan is expected to further mobilize the government institutions, the private sector and the citizens in Jakarta's strive for reducing emissions by 2030. With the help of the ACP project DKI Jakarta will be able to attract more attention to achieving the transition to renewable energy and build partnerships that create stronger ties between public and private sector stakeholders that encourage energy efficiency.

DKI Jakarta's government is open to more suggestions from private sector counterparts for solutions to further unfold energy transition and low carbon development. It, therefore, welcomes private sector participation in the city's regular public consultations. Information on the upcoming consultations will be shared with CiBiX participants once details are announced. DKI Jakarta also hosts regular Energy Forum meetings to facilitate multi-sector dialogue on sustainable energy initiatives.

[For more information on Ambitious City Promises](#)



About the CiBiX Ideator for Ambitious City Promises

CiBiX (City Business Accelerator), ICLEI's service model for City-Business Collaboration, will connect ACP cities to state-of-the-art technology and to overarching smart city concepts to support the development of City's Low Emissions Development Plan (or "City Promise"). The CiBiX Ideator workshop will assist the cities in identifying innovative solutions to their pressing problems and urban infrastructure needs to strengthen their long-term climate goals. Additionally, this exchange will enhance the participation of business sectors, one of the major target groups of the Ambitious City promises project, as part of stakeholder interaction in the development and implementation of the City Promise.

About ICLEI - Local Governments for Sustainability

ICLEI – Local Governments for Sustainability is the leading global network of more than 1,500 cities, towns, and regions in over 100 countries committed to building a sustainable future. As a global network, ICLEI is a connection point between local and regional governments worldwide. Through our collective efforts, ICLEI is mobilizing its global network to connect with their peers and to build strategic ties with key actors and influencers outside the governmental sphere and impact more than 25 percent of the global urban population.

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