GREEN BUILDING CITY MARKET BRIEF

MOSCOW

CITY DETAILS

- Population: 12.1 million
- Land Area (km²): 2,511
- Gross Domestic Product (in USD billions): 520.1
- Average Walk Score: 392/100
- Annual Rainfall (mm/year): 1,015
- Climate Action Plan: In Progress

BUILDING PERFORMANCE EMISSIONS

- City-wide Emissions (metric tons CO₂e): 44,600,000
- % of Emissions from the Building Sector: --
- Municipal Emissions (metric tons CO₂e): --

MEMBERSHIP AND PROFESSIONALS

- LEED Credentialed Professionals (Russia): 533
- LEED Certified Projects (Moscow): 35
- LEED Registered Projects (Moscow): 13
- LEED Certified Projects (Russia): 71
- LEED Registered Projects (Russia): 8
- BREEAM Certified Projects (Moscow): 22
- BREEAM Registered Projects (Moscow): --

PROJECT BREAKDOWN

- LEED Gold Projects: 7
- LEED Silver Projects: 6
- LEED Gold Projects: 1
- LEED Silver Projects: 5

EMISSIONS TARGET:

Moscow aims to achieve a 20% reduction in greenhouse gas emissions by 2020, compared with 2009 emissions.

LEADING BY EXAMPLE

Through the new federal standard, municipalities like Moscow are required to list energy efficiency target parameters each year. Parameters include volume of energy consumption per unit of regional GDP, shares and consumption of different kinds of energy calculated by meters, shares and volumes of energy produced by renewable energy sources, and savings on energy and water. The targets are to be spread out across all building sectors, including residential.

GREEN CODES

In 2009, Federal Law No. 261-FZ was enacted, establishing standards for regulating energy consumption to encourage energy savings. For example, the law restricts the sale of incandescent light bulbs, introduces the requirement to provide energy efficiency information on product labels, establishes guidelines on mandatory commercial inventories of energy resources, creates standards on energy efficiency of new buildings, and sets energy reduction goals. The law also requires an energy audits and metering for all public buildings and establishes that public agencies must reduce their energy and water consumption by 15% by year's end 2014.

MAYORAL POWERS

This graph depicts the level of control or influence a Mayor has with respect to the assets under the city's jurisdiction. Powers are assessed by four factors (ownership and control, ability to set and enforce regulations, control over infrastructure budgets, and capacity to set vision), and covers the city-wide geographic area.
POLICY SPOTLIGHT:
In 2011, the Federal Government approved an energy saving program for Moscow to run until 2020. Its goal is to reduce energy intensity by no less than 40% by 2020, compared to 2007. This goal is in line with the national target of a 40% reduction per unit of GDP by 2020, compared with 2007 levels. The program targets 40,000 residential houses and 75 nonresidential buildings. Roughly $6.5 billion USD has been allocated for implementation of the program from both the city and national governments.

ENERGY CONSERVATION
The city of Moscow Government’s Energy Conservation Strategy intends to ensure more efficient use of energy resources by city consumers through a reduction in energy losses during production, conversion, transport and end use. Targeted outcomes include:

- A reduction of energy intensity of gross regional product from 41 kg to 34 kg of reference fuel per 10,000 roubles (in 2007 prices)
- Gross electricity savings from 1.153 mln to 1.048.55 mln kWh (cumulative)
- Gross heating energy savings from 1.58 mln to 1.41 mln Gcal (cumulative)
- Gross natural gas savings from 449.24 to 181.86 mln m3 (cumulative)
- Gross water savings from 111.06 to 23.34 mln m3

GREEN BUILDING MARKET
An increasing number of buildings of various types ranging from commercial offices and interiors to large-scale complexes have been assessed to LEED & BREEAM standards. The opening of the Green Building Council Russia, a member of the World Green Building Council (WGBC) in 2009 has stimulated the industry with numerous events, trainings and other projects.

PRIVATE SECTOR INCENTIVES
Russian taxpayers are entitled to a 3-year exemption on corporate property tax for newly introduced energy efficient systems such as air conditioners, elevators and computer technology. Investments in energy efficient equipment can also qualify for accelerated depreciation at twice the standard rate for profits tax purposes.

GREEN RESIDENTIAL BUILDINGS
The Russia Residential Energy Efficiency Project was initiated in 2010 by the Ministry of Employment and the Economy in collaboration with the International Finance Corporation. It aims to stimulate investment in the energy efficient renovation of residential multifamily buildings in order to reduce that nation’s greenhouse gas emissions. The project is expected to cut Co2 emissions by 2.5 million tons by its end in 2015.

PROJECT SPOTLIGHT:
Siemens Russia Headquarters
Siemens Russian Headquarters, located in Moscow, achieved Gold Certification under the LEED for Commercial Interiors rating system in March 2012. The building’s design resulted in a 20% reduction in lighting power density and a 35% reduction in indoor potable water usage, both against a modeled baseline. Construction and demolition debris associated with the project were diverted from landfills at a 50% rate.

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REFERENCES
5. LEED Professionals and Project Figures were retrieved on 6 January 2015.