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Dear participants of the Forum, dear partners!

Let me thank you for the provided opportunity to address you from this important tribune and inform what Moscow is doing. I will be short in describing how the work on energy saving and increase of energy efficiency is organized and what areas we could cooperate in.

Short numbers are as follows. Moscow is the largest metropolis with the annual energy consumption of 33 mln. tons of equivalent fuel. Over 90% of this fuel is used in fuel and energy complex – that is by Moscow TEC (Heat Station). The key generating companies and consumers of primary fuel are ‘Mosenergo’ OAO and ‘Moscow Energy Company’ OAO. The consumption of primary fuel is mainly the consumption of natural gas. Coal is used rarely and mainly in private sector. Mazut (fuel oil) is used as well, but it is in fact a reserve fuel that is used in minor volumes.

Electric power generation at ‘Mosenergo’ OAO power station constitutes about 98% from the total generation. 14 power plants generate electric power and heating with the cycle combined and district heating centralized. Additionally 42 district and 31 block heating stations supply heat to the city. There are about 100 small boilers and more than 800 departmental boilers – quite a large household, and yet in total volume of heat energy generation all these boilers constitute not more than 5-7%.

What are the figures on energy consumption? For the year 2009 the actual electric power consumption constituted 37.1 bln. kW/h; heat energy – 83,9 mln. Gcal; natural gas consumed in Moscow is 26,9 bln. m³. The total limit constitutes about 30 bln. m³, however we have never used such volume yet. Furthermore, we consumed 1,5 bln. m³ of water in 2009. Currently, the consumption volumes have considerably increased in the city. The annual growth constitutes 5-6% that is first of all for the account of the new construction. The housing sector has 50% in the consumption structure. 20 years ago the weight of housing was ‘behind’ industry. Current structure formed in such a way that the housing sector constitutes more than 50%. The social sphere, trade, services constitute about 30%, and 16% cover the industry. In 2009, the building sector gave main impact with 2,7 mln. m² of building sites.

We estimate the city’s energy saving potential in about 11 mln. tons of equivalent fuel. How are these problems treated? There are municipal functioning programs: the task municipal program on energy saving for 2009-2011 and for the future prospect by 2020. The figures of this program are as follows: the total electrical power saving shall be 4.9% bln kW/h, heat power saving – 11.9 mln. Gcal, the reduction of electrical capacity shall be 1 GW, the total natural gas saving – 2.6 bln. m³, water saving – 108 mln. m³, atmosphere emission – 5,9 thousand tons. As to the energy saving measures, if we take the basic ones this is, first of all, development and technical re-equipment of ‘Mosenergo’ Joint Stock Company.

It is being developed due to implementing cogenerating cycles, steam and gas-turbine units. For example in 2009, the unit with a capacity of 450 MW was installed on TEC-21, this year

another unit with a capacity of 420 MW is getting ready to be installed on TEC-26. These are all gas-turbine cycles, including the one on TEC-26 from 'Alston' French company. TEC-21 is supported by 'Siemens', German company. Therefore there is also brotherhood between German and French companies.

In heat-supply grid we are making an active replacement of steel pipes for pipes of polyethylene, with polyurethane isolation. Also we are actively implementing gas equipment in power sector. Cable production in high-voltage networks as a rule is made of polyethylene which also provides costs saving. Today after the Federal Law 261 was adopted last November, our program is being reviewed and duly optimized to meet those figures and requirements that were set by the Federal Law and Federal Program. Furthermore our objective is to save energy and all kinds of resources by 15% within 5 years.

Also there are measures focused on providing growth of secondary energy resources without growth of primary resources, first of all natural gas. Furthermore, we also aim at making the energy saving industry attractive for business. That is our main objective – to actively involve not only resources' producers but also consumers, to create a ground for energy saving motivation and stimulation. We are also drawing attention to alternative and renewable energy.

Advocacy (public relation) is of separate program section. Each of the tasks is unique in its own way and if we are speaking on the topic mentioned by the previous speaker – alternative types of energy – we are also working on this issue, first of all on account of secondary energy sources. For example, last year we put into operation mini Heat Station based on Kurianovsky water-treatment facilities. This mini station uses sewages and reprocesses wastes in biogas in meta-tanks that is burnt later on. We have a 10 MW electric capacity unit and 8 MW in heat. Additional annual generation will constitute about 100 mln. kW/h which provides about 70% of the electric station's demand.

We are also working in an experimental mode mainly on heat pumps; there are practical examples of implementing including the housing sector. There are also practical examples in photovoltaic – primarily in building entrances, public places and the park zones. I assume we should be actively participating in these issues, however the field of our activity is rather wide.

Based on advocacy of energy saving our estimation shows that on account of this resource we may save about 10% of energy resources after implementing energy efficiency bulbs. For example, there was an extensive advocacy of energy efficiency bulbs in 2008. The purchases' analysis in trade chain showed that the purchases increased in several times. Therefore we suppose that the feedback is quite serious. I would also like to mention that last year Moscow government issued a Decree according to which we prohibited to use filament bulbs in the budgetary sphere, it was prohibited not on a removing at once basis, but we proposed a model that allows to replace them with the energy saving ones in a process of changing the old illuminating. We are actively working in this field today and within 2-3 years we expect to make a total replacement of filament bulbs in our sphere.

I would also like to draw your attention to the field of energy service contracts. We suppose that the main source of funds for implementing energy saving measures is first of all economy that we may reach and the funds that we may receive due to this economy. Today we developed a method of implementing energy service contracts in the budgetary sphere. Currently the Moscow Government is preparing a Decree and upon its adoption, we will be actively recommending it to all state customers as the key mechanism to finance energy saving measures. I mention it because we were not able to implement the potential we currently

have, like many consumers present here, due to the lack of funds. These funds have emerged by now, they are determined by law, and there are methods as well.

Today there are 28 state consumers only in the city's budgetary sphere. You may get to know and acquainted with them either on our website and portal. Furthermore, you may see the spheres where you can make business, and present yourself and I'm inducing you to do so.

Moreover, for better acquaintance I suggest you to participate in such events. For example on 27-29 October "Energy Efficiency Problems and Solutions" international conference will take place in Moscow. This is an annual conference that was initiated by Moscow government. Such large energy service companies, like members of 'AVOK' Association, participate there. This company represents a deep interest for those who work in this business. You may also get acquainted directly either with the companies or with the customers. The exhibition and round tables will be also held there. Furthermore, upon initiatives of 'Assembly of Capitals and Large Cities', another event will take place in the beginning of December, that is 'Megapolis XXI'. This Forum will be represented by energy saving section, as well as by state customers, i.e. the industries and territories of Moscow that are interested in these projects. Also round tables will be held there and you may find the contact information and exchange opinions and perhaps proposals.