

MOSCOW CITY GOVERNMENT Department of Natural Resources Management and Environmental Protection

MOSCOW – 2017: THE FIRST CLIMATE FORUM



Moscow - 2018



"The main objective of the Forum was to share experiences on developing effective climate and environmental strategies. We have already managed to achieve this objective by assembling an audience for a unique international dialogue of scientists, governmental and local officials, media, non-governmental organisations and business.

It was Moscow that initiated this forum because we have a wide experience in this field, recognise the need for alterations, innovations and special attention to climate change issues and we are ready to share this experience. Moscow is leading the field in the implementation of the latest technologies that not only allow to reduce the environmental impacts and greenhouse gases emissions, but also have significant economic effect.

Anton Kulbachevsky, Moscow Department of Natural Resources

Management and Environmental Protection, Head

The Climate Forum reports and presentations were made by representatives of the Ministry of Natural Resources and Environment of the Russian Federation, the Ministry of Industry and Trade of the Russian Federation, the Ministry of Energy of the Russian Federation, the Federal Service for Hydrometeorology and Environmental Monitoring of the Russian Federation, the Federal Forestry Agency, the Committee on Natural Resources, Property and Land Matters of the State Duma of the Federal Assembly of the Russian Federation, the Committee on Energy of the State Duma of the Russian Federation, the Commission on Ecology and Environment Protection of the Civic Chamber of the Russian Federation, the Chamber of Commerce and Industry of the Russian Federation, Analytical Centre for the Government of the Russian Federation, Russian Bureau of Best Available Techniques, as well as by representatives of the regional executive authorities.

Researchers from the Institute of Global Climate and Ecology of Roshydromet and Russian Academy of Sciences, Institute of Geography, P. P. Shirshov Institute of Oceanology, Koltzov Institute of Developmental Biology, A. M. Obukhov Institute of Atmospheric Physics, Centre for Ecology and Development of the Institute of Europe, other scientific institutes of Russian Academy of Sciences, Lomonosov Moscow State University, Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs of the Russian Federation, National Research Universities 'Higher School of Economics' and 'Moscow Power Engineering Institute', Russian Presidential Academy of National Economy and Public Administration, Central Aerological Observatory, Dmitry Mendeleev University of Chemical Technology of Russia, All-Russian Research Institute for Silviculture and Mechanisation of Forestry, Russian Geographical Society, Russian Union of Architects, Environmental Investment Centre, Centre for Energy Efficiency XXI century, Centre for Environmental Initiatives, World Wildlife Fund, Russian Society for Nature Preservation, Greenpeace Russia and other organisations actively participated in the Climate Forum.

Foreign guests represented World Health Organisation European Centre for Environment and Health, the Sustainable Development Mechanisms Programme of the United Nations Framework Convention on Climate Change, the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus, the Swedish Environmental Protection Agency, the Federal Environment Agency and the Renewable Energy Agency of Germany, C 40 Cities Climate Leadership Group, the GEOMAR – Helmholtz Centre for Ocean Research, German International Co-operation Society (GIZ), regional and municipal authorities, research organizations and consulting companies from Belarus, the United Kingdom, Germany, Denmark, Kazakhstan, the People's Republic of China, the Republic of Korea, the United States of America, Thailand, Finland, France, Switzerland, Sweden and Japan.

The business was represented by the largest Russian and international corporations and companies: PJSC Gazprom, PJSC Sberbank, UC Rusal, JSC United Chemical Company URALCHEM, PJSC LUKOIL, JSC Mosenergo, SUEK Group, L'OREAL, Philip Morris International and others.

CLIMATE FORUM OF RUSSIAN CITIES GATHERED SEVEN THOUSAND EXPERTS AND PARTICIPANTS FROM SEVENTEEN COUNTRIES ACROSS THE WORLD

In August 2017, the first Climate Forum of Russian cities, being a part of Russian Year of Ecology and Specially Protected Nature Conservation Areas, was organised by the Department for Natural Resources Management and Environmental Protection of Moscow.

About 7,000 people, including well-known international experts from 17 countries and representatives of 36 Russian regions, visited the Moscow Manege on August 21 and 22.

The Forum was opened to Russian and international experts, Moscow residents and visitors to the capital. Over 300 reports, expert opinions and case studies composed the Programme of the event.

The participants discussed approaches to developing effective climate strategies, promising directions of community development and urban planning, climate risks and opportunities for business, innovations and technologies, feasibility of alternative energy, international experience in implementing climate change mitigation and adaptation projects.

SPEAKERS: ALL FLAGS WERE TO VISIT US



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Aleksandr CHEKRYGIN VTB Factoring



Iana DAVIDOVA C40 cities



Albina DUDAREVA Civic Chamber of the Russian Federation



Georgy ALEKSANDROV Carbon Balance and Management Journal



Dmitry BEREZUTSKII Green Stroi Association



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GLOBAL AGENDA FOR CRUCIAL CLIMATE CHANGES ON THE GLOBAL STAGE. STRATEGIES FOR CLIMATE RISK MANAGEMENT

Scientific Theories and Contemporary Challenges of Global Warming

Total anthropogenic GHG emissions have continued to increase over 1970 to 2010 with larger absolute decadal increases toward the end of this period. Despite a growing number of climate change mitigation policies, annual GHG emissions grew on average by 1.0 gigatonne carbon dioxide equivalent (2.2 %) per year from 2000 to 2010 compared to 0.4 Gt CO_2eq (1.3 %) per year from 1970 to 2000.

Total anthropogenic GHG emissions were the highest in human history from 2000 to 2010 and reached 49 (\pm 4.5) Gt CO₂eq/yr in 2010. The global economic crisis 2007/2008 only temporarily reduced emissions.

 CO_2 emissions from fossil fuel combustion and industrial processes contributed about 78 % of the total GHG emission increase from 1970 to 2010, with a similar percentage contribution for the period 2000-2010. Fossil fuel-related CO_2 emissions reached 32 (±2.7) Gt CO_2 eq/yr, in 2010, and grew further by about 3 % between 2010 and 2011 and by about 1-2 % between 2011 and 2012. Of the 49 (±4.5) Gt CO_2 eq/yr in total anthropogenic GHG emissions in 2010, CO_2 remains the major anthropogenic GHG accounting for 76 % (38±3.8 Gt CO_2 eq/yr) of total anthropogenic GHG emissions in 2010. 16 % (7.8±1.6 Gt CO_2 eq/yr) come from methane (CH₄), 6.2 % (3.1±1.9 Gt CO_2 eq/yr) from nitrous oxide (N₂O), and 2.0 % (1.0±0.2 Gt CO_2 eq/yr) from fluorinated gases.

Globally, economic and population growth continue to be the most important drivers of increases in CO₂ emissions from fossil fuel combustion. The contribution of population growth between 2000 and 2010 remained roughly identical to the previous three decades, while the contribution of economic growth has risen sharply. Between 2000 and 2010, both drivers outpaced emission reductions from improvements in energy intensity. Increased use of coal relative to other energy sources has reversed the long-standing trend of gradual decarbonisation of the world's energy supply.

Without additional efforts to reduce GHG emissions beyond those in place today, emissions growth is expected to persist driven by growth in global popula-





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tion and economic activities. Baseline scenarios, those without additional mitigation, result in global mean surface temperature increases in 2100 from 3.7 °C to 4.8 °C compared to pre-industrial levels (range based on median climate response; the range is 2.5 °C to 7.8 °C when including climate uncertainty).

-40 -30

-20

-10

Changing climate and cities: challenges and adaptations

As urban areas and populations continue to grow, so will the potential human and economic losses associated with the shocks and stresses that confront these areas. In recent years, many cities have experienced the effects of industrial structural change (i.e., deindustrialisation), economic crises and natural disasters (i.e. earthquakes, floods, hurricanes),



One finds different degrees of resilience across cities. Policy makers need to gauge their cities' resilience, identify gaps and propose measures to fill these gaps. This makes resilience-building a cross-sectoral, multidimensional effort, requiring effective co-ordination among diverse interests and groups.

The methodological basis for the development and assessment of management systems for sustainable development and resilience of cities is set by the international standards ISO 37101:2016 'Sustainable development of communities – Management system for sustainable development' and ISO 37120:2014 'Sustainable development of communities – Indicators for city services and quality of life'.

including the attendant disruptions in energy supply.

Resilient cities are characterised by adaptive capacity, robustness, redundancy, flexibility, resourcefulness, inclusiveness and integration. Resilience is enhanced by four interrelated types of drivers: economic (industry is diversified, innovation takes place, workforce has diverse skills, and infrastructure supports economic activities), social (society is inclusive and cohesive, citizen networks are active, people have access to opportunities), environmental (urban development is sustainable, infrastructure is adequate and reliable, and natural resources are available) and institutional (leadership and long-term vision are clear, public sector has adequate resources, collaboration with other levels of governments takes place, government is open, and citizens participate).



Drivers of resilient cities

Developing City Climate Strategies: Milestones and Effective Mechanisms

The speed of climate change is a major challenge to society and to nature. It is vitally important to mitigate the progress of climate change and to reduce greenhouse gas emissions. It is necessary to ensure that GHG cuts become a consistent element in the objectives imposed by various city agencies for their own operations. Effective climate change mitigation strategies mainly focus on instruments that fall within the purview of city authorities firstly and, secondly, can be realised through operations and guidance measures. In addition to work by city authorities, the actions of residents and businesses will have a major impact on emission reductions. In all cities, quantitative objectives need to be set and progress monitored for homes, services, industry, land use and transport, while responsibility for controlling climate change must be viewed as a fundamental element of urban

planning and policymaking.

A typical climate vision for the year 2030 is shown using example of a northern city.

A special report by the Intergovernmental Panel on Climate Change (IPCC 2012) dealt with adaptation and managing the risks of extreme events and disasters. The main message is that our body of knowledge about climate change is already sufficient. We can make good decisions on managing the risks of weather phenomena and climate change and on preparing for them.

Adaptation strategies concentrate on the adaptation of the built and urban environment to the changing climate. The vision of the strategy is climate proof city – the future is built now. The strategy aims to 1) assess the impacts of climate change in the area,



2) prepare for the impacts of climate change and to extreme weather events and 3) to reduce the vulnerabilities of the area to climate variability and change. The target is to secure the well-being of the citizens and the functioning of the cities also in the changing climate conditions.

In the strategy, the adaptation policies are divided into several groups: regional and joint strategic starting points in adaptation and short-term adaptation policies. The policies are normally defined for the following sectors and crosssectoral issues: 1) Land use, 2) Transport and technical networks, 3) Building and climate proof local environment, 4) Water and waste management, 5) Rescue services and safety, 6) Social and health services, and 7) Co-operation in producing and disseminating information.

Extreme weather events of the recent years have demonstrated the vulnerability of our societies to natural hazards and the importance of preparing for them. We are very dependent on electricity and transportation, and long-lasting power cuts and traffic brakes can have a significant impact on such things as communications, heating, water supply and logistics. The significance of co-operation between authorities and other actors in the prevention of natural disasters and in

the recovery of them is now being highlighted in all cities. Preparing in advance for disasters and their consequences is worth doing, as it reduces the damages and costs that arise from them.

The monitoring of implementation of regional adaptation measures, changes to the operating environment and following the latest climate research information is important, so that various regions can prepare for the impacts of climate change in advance and as effectively as possible, and the effectiveness of measures can be assessed through a reduction in vulnerability. Operating methods need to be examined from time to time, if such things as an increasing amount of climate information or changing regulations require so.

Climate Change: Futuristic Estimation and Its Impact on Urban Development Problems and Opportunities

Climate change is on top of the agenda of actual scientific, political and public discussions. Heat island effects in summer, extremely cold and snowy winters or wetter autumns with increased flash flooding are only a few phenomena, which have great impacts on the urban living conditions. We have to face these challenges.

Our urban city regions must not only react on the effects of climate change and adapt to it but think of completely different – futuristic solutions that may look fantastic and impractical today but have already started to be implemented in various regions of the Globe.

The futuristic cities of science fiction hold a strong appeal in our collective imagination. The thought that we might one day revolutionise everything about how we live – including where we live – is an exciting one. What's even more excit-

ing is the idea that some of the most outlandish cities from science fiction might be within our technical reach tomorrow.

Even today, there are urban centres already addressing some of the biggest predicaments facing governments, urban planners, architects, and ordinary denizens.

How to adopt to climate change, accommodate booming populations, increase the efficiency and availability of transport, foster the growth of businesses, support technological innovation, and make the intricacies of government more transparent to citizens? These questions have to be considered today to be replied tomorrow.



CLIMATE AND BUSINESS: ON THE WAY TOWARDS MUTUALLY BENEFICIAL CO-OPERATION

Ascending Trajectory of Climate Projects: Formats for Mutually Beneficial Partnership of Government, Business and Society

Companies and governments now realise that urban development, from new housing and office complexes to transportation projects, requires collaboration, not conflict, between the private, public and third sectors. The interrelatedness of various climate change issues calls for the private sector, government and civil society to work together to mitigate

those risks in the communities in which they operate.

Across the world, as the global population booms and consumes even more materials in the next several years, it is clear one stakeholder group cannot confront these challenges alone. While companies struggle to build more resilient supply chains, the public sector has the task of providing a safe infrastructure so businesses can continue to thrive; and civil society must ensure the planet's resources and people are treated fairly and equitably.

It is possible to create a business environment in which sustainable and low-carbon growth are not only feasible, but necessary in a world with constrained resources.



Both the private and public sectors have long been guilty of a linear approach towards development and economic growth. A dismissive view of waste, excessive water consumption and environmental degradation were, for example, the by-products of construction projects. Instead, a circular economy, with a view towards development as an ecosystem, is necessary to instil a smarter use of resources.

A complete rethink is necessary if society is to sustain an increasingly urbanised population in the coming decades. Large construction firms must work with suppliers and bring them up to speed on the responsible procurement, recycling and reuse of building materials. NGOs can ally with businesses by advising them on the impact their operations have on the environment and communities, and work together to find solutions allowing smart growth with minimal environmental degradation.

Finally, governments must be more consultative with the private sector as they mull new and updated regulations. The future of regulation should inspire collaboration, not confrontation, as all stakeholder groups will need to rely on each other as we struggle to maintain a built environment for a world expecting to hit 9 billion people by 2050.

Climate Regulation at the Community and Territory Level

While the challenge of sustainable development is global, the strategies for achieving it at community level are local, to a large extent, and can therefore differ in context and content from country to country and region to region.

Community strategies need to reflect the context, preconditions, priorities and needs, particularly in the social environment, e.g. social equity, cultural identity and traditions, heritage, human health, safety and comfort, and social infrastructure. These aspects vary from one territory to another and need to be considered thoroughly.

In order to become more sustainable, communities also face the challenge of respecting planetary boundaries and taking into account the limitations these boundaries impose.

The concept of planetary boundaries describes a framework within which humanity needs to live in order to continue to develop and thrive for generations to come. Climate change, freshwater consumption, land-use change and loss of biodiversity are examples of planetary boundaries. Crossing these boundaries could generate abrupt or irreversible environmental changes, while respecting them significantly reduces risks. Planetary boundaries can be broken down in order to select measures that can be addressed at community level, while taking into account the specific situation.



The management of sustainable development in communities encompasses a wide range of issues, e.g. issues related to the economic, social and natural environment of communities and their interactions. Those issues can have strategic, operational and competitive implications.

The capacity to foster cross-discipline harmony and common purpose is fundamental to achieving a community's objectives effectively and efficiently.

Although each community has values and interests of its own, all communities can derive mutual benefits from agreeing upon ownership of shared values and objectives without exonerating individual actors from their respective responsibilities. This can be achieved only if the community applies a long-term view on planning, while respecting the Earth's overall capacity and the needs of current and future generations, including the capability and resources to provide resilience.

Climate Risks and Opportunities for Business. Climate Challenges and Successful Corporate Strategies

Given the sweeping global nature of climate change, climate risks and opportunities become embedded in the operations of all companies. Some companies with significant emissions of greenhouse gases or energy use face current or future regulatory risks.

These risks may include operational risk, market risk, liabilities risk, policy risk, regulatory risk, and reputational risk. In some cases, the risks to companies may be indirect. For example, even if a company is not directly subject to regulations, significant emissions in its value chain may still result in increased costs (upstream) or reduced sales (downstream).

Climate change may pose a range of physical or financial risks to other firms. To help investors analyse these risks, investors encourage companies to assess and disclose material, physical effects that climate change may have on the company's business and its operations, including their supply chain.

Climate change also represents significant opportunities for many firms. Some companies will develop profitable new technologies or markets as governments pursue innovative strategies to address climate change and spur technology development.

More and more companies recognise the importance of corporate, organisational, and individual leadership in response to climate change.

Leaders recognised represent a wide array of industries, including construction, finance, manufacturing, defence, transportation, retail, energy and technology. They demonstrate leadership in managing and reducing greenhouse gas emissions in internal operations and throughout the supply chain, as well as integrating climate resilience into their operating strategies.



There is a need for sector and region-oriented studies examining how leading companies address climate change. It should explore the risks, rewards, opportunities and barriers surrounding corporate action on climate change and provides insight into the strategies employed by companies that have led the way in taking early action. The lessons learnt by early actors can inform the efforts of those who follow.

Climate Innovations: Blockchain Technology in a Smart City Economy, Environment and Energy Generation and Use

As revolutionary as it sounds, Blockchain is a mechanism to bring everyone to the highest degree of accountability. By design, the blockchain is a decentralised technology. Anything that happens on it is a function of the network as a whole. By creating a new way to verify transactions aspects of traditional commerce could become unnecessary. And decentralisation is already a reality. Blockchain is an instrument that can help turning cities to becoming smart, open and sustainable systems.

In view of the enormous social and environmental changes at the global level, more and more cities worldwide have directed their development strategies towards smart policies aimed at sustainable mobility, energy upgrading of the building stock, increase of energy production from renewable sources, improvement of waste management and implementation of ICT infrastructures.

The goal is to turn into Smart Cities, able to improve the quality of life of their inhabitants by offering a lasting opportunity for cultural, economic and social growth within a healthy, safe, stimulating and dynamic environment.



A Smart City is a city that guarantees:

- economic competitivity (smart economy), innovation, enterprise, economic image and brands spirit, productivity, job market flexibility, international integration, transformation capacity;
- training and social interaction of citizens (smart people), qualification level, long-term training, social and ethnic plurality, flexibility, creativity, cosmopolitanism and mental opening, participation to public life;
- administration functioning and services (smart governance), participation to decision-making, public and social services, transparent government activity, politics strategies and perspectives;
- availability of information and communication technologies and modern and sustainable transportation systems (smart mobility), local accessibility, international accessibility, availability of IT infrastructures, sustainable, innovative and safe transportation systems;
- high environmental quality (smart environment), attractiveness of natural conditions, environmental protection, sustainable management of resources;
- life, culture, health and safety quality (smart living), social structures, health conditions, individual security, dwellings quality, educational structures, touristic attractiveness, social cohesion.

FORUM'S EXPO 'FURURE CITY'

An exhibition display of new technologies for developing modern territorial infrastructure, supporting environmental sustainability and preparedness to climate change of Russian cities became a welcoming complement to the profes-



sional programme of the Forum.

Of these, there were several technological solutions that draw public attention: 'Robograd', a pilot project of Udmurt Republic on the innovative network city, an operating unmanned aerial vehicle SKYF, showpieces of unmanned and controlled Tesla S, Renault Kangoo, Renault Twizy automobiles, Russian unmanned passenger electric minivan 'Matryoshka', examples of charging stations for electric vehicles, alternative energy sources and much more.

An interactive event for the preparation of seedlings for an alley of fast-growing Paulownia trees attracted a lot of attention from the participants and guests of the forum. The unique fast-growing saplings are capable to sprout up to 4 meters in one year even in the moder-

ate climate zones of Russia and withstand frosts up to minus 40 °C. The participants had a chance to participate in preparation of these young trees for further cultivation in one of the Moscow parks.

The Climate Forum Audience Award went to Adidas company and its animated 'Lifestyle' exposition where everyone could measure a body weight, master a modern fitness equipment and listen to the Adidas Academy workshops on healthy lifestyle. Following the key topic of the Forum, Adidas presented the results of partnership with Parley established for processing plastic waste into eco-outfit for professional sportsmen.

The exhibition kept attracting attention of both experts and Muscovites who visited the Forum with children for two days. Here journalists interviewed policy makers and business people, here speakers often returned to get a short break between panel discussions and round tables. This is why organisers



believed that the Forum Expo played its awareness raising and entertainment role.

RUSSIA'S FIRST CLIMATE AWARD: CLIMATE RESILIENCE LEADER



The purpose of the contest held during the Forum was to disseminate experience of the best Russian projects on energy efficiency, rational resource use, recycling, conservation of natural heritage, creation of environmentally friendly urban environment and development of modern solutions for climate change mitigation and adaptation.

The Jury was composed of leading experts, community leaders and Moscow Department for Natural Resources Management and Environmental Protection executives and selected winners on five different climate-related nominations. The winners of the contest were named on the first day of the Forum.

The project of modelling climate scenarios for the development of Moscow urban area during 21st century

under global warming conditions performed by the laboratory of Lomonosov Moscow State Universityreceived the Visionaries Award.

The Communities Award went to Volunteer Environmental Headquarters of the city of Cherepovets for the environmental project 'Green Region 35'.

The Best Regional Eco-Project Award was given to the project of the Kaluga region: 'Tarusa – the first eco-city in Russia'. The project is based upon the integrated sustainable development of the existing urban ecosystem. It is at the stage of implementation now, the planning horizon will cover a period of 50 years and more, estimated annual turnover of the territory will be 5.7 billion roubles per year (discount to the current date).

The work of PJSC Mosenergo was recognised by the jury as



making the most significant contribution to the environmental safety of the region. CJSC L'Oreal, JSC RUSAL Krasnoyarsk and PJSC Mosenergo were declared as The Eco-corporations of the Year.

The special prize of the Jury went to the work 'Hydrological cluster. Scientific and Educational Complex for Monitoring the Volga River'. Award's official partner, Moscow State Institute of International Relations (MGIMO), established and presented its own prize to the project '360 Minutes – Russian Voluntary Environmental Marathon' implemented by En+ Group.

CONCLUSION

It is necessary to further consolidate the efforts of all stakeholders participated in the Forum in consideration of international approaches towards developing climate strategies for reducing GHG emissions, adapting to climate change and sharing success stories of the implementation of green projects in this field. The 'Climate co-operation' between Moscow and its partner cities in Russia, neighbouring countries and beyond should be developed and strengthened by using existing national and international projects, conferences, festivals, exhibitions, seminars and starting new initiatives. Special attention should be given to the opportunities for the involvement of Russian cities into The C 40 Cities Climate Leadership Group activities.

It is important to mention the key role of national hydrometeorological services in the development of effective warning systems for extreme weather conditions and providing objective factual and predictive information in the regions of presence. In Russia, climate research activities of the Federal Service for Hydrometeorology and Environmental Monitoring form the necessary scientific basis for policies and measures which are instrumental in mitigation and adaptation to climate change effects. It is essential to strengthen efforts directed at increasing the awareness of decision-makers and public about climate change issues and facilitate stakeholder access to national scientific research data.

There are several priority climate change issues: description and analysis of specific regional features, gradual introduction of regulatory measures and use of load-balancing mechanisms for energy-intensive industries, specification of long-term regulatory objectives and corresponding obligations of enterprises. It is necessary to take on the task of integrated assessment on vulnerability of territories, industrial, urban and transport infrastructure, population and ecosystems. The data obtained will be used as a basis for adaptation concepts and strategies for Moscow: urban adaptation plans with particular regard towards Russian national concepts. Those should cover all sectors of the economy and infrastructural complexes. These projects can be replicated with appropriate consideration for regional specifics in other Russian cities.

It is appropriate to involve leading Russian centres for scientific and technological forecasting and wide range of stakeholders: representatives of science, universities, business, regions, expert community into a network for monitoring global trends, emerging markets and advanced technologies in the field of climate change initiatives. The new Russian environmental regulation is based on the demand for the key sectors of the economy to comply with Best Available Techniques; this lays the foundation for motivating industrial enterprises and energy generating facilities to improve environmental performance and energy efficiency and enhance business sustainability. It will be impossible to promote climate change issues and environmental protection initiatives among the general public without appropriate training and awareness raising. So, it is necessary to consolidate the efforts of government bodies, higher and secondary educational institutions, scientific institutions, non-governmental organisations developing and implementing educational programmes and projects; support federal and regional media concern about climate issues with a focus on local climate change issues and need to implement mitigation and adaptation measures at the regional level.

It should be considered that strategy, reporting, establishment of sustainable development management systems, improving the resilience of cities and ensuring preparedness for climate change requires work based on the principle of continual improvement: when addressing these tasks, it is necessary to improve the data gathering and dissemination processes, seek support for urban sustainable development strategy, use the results to strengthen the image of Moscow as one of the recognized world leaders. The Government of Moscow is advised to form the International Environmental Expert Council for carrying out assessments of international practices in the field of environmental safety and quality urban environment in global cities and metropolitan centres and proposal development for the introduction of the best international practices to Russian cities.

The Climate Forum can and will establish the basis for permanent online and offline platform with the purpose of providing international and inter-regional exchange of experience and information in the field of climate change, strategic and operational management decisions, technological and technical measures for climate change mitigation and adaptation as well as the environmental conservation in general.



The following materials were used for the preparation of this brochure:

- presentations of key speakers and materials organisations they represent;
- national reports prepared in accordance with the requirements of the United Nations Framework Convention on Climate Change;
- materials of the World Health Organisation;
- reports of the Intergovernmental Panel on Climate Change;
- international standards on the sustainable development and resilience of cities and communities;
- international standards and methodologies in the field of environmental assessment of projects and green building;
- materials of the C 40 Cities Climate Leadership Group;
- climate strategies of European, Asian and American cities and regions;
- national and regional reports on the state of environment;
- open reports of business corporations and companies;
- materials of the Analytical Centre of the Russian Federation Government, WWF Climate Programme, Centre for the Efficient Use of Energy, as well as materials of other research, educational, non-governmental organisations working in the field of climate change mitigation and adaptation.

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