

TECHNOPOLIS
MOSCOW

THE FUTURE IS MADE HERE

September 5, 2013

ABOUT THE PROJECT

EXECUTIVE SUMMARY

- **TECHNOPOLIS MOSCOW** is a project of industrial redevelopment of the territory of an old automotive plant located in the City of Moscow into a new industrial park for innovative hi-tech manufacturing
- Old, but solid buildings of the former plant are being renovated to become a shared brownfield facility for dozens of modern technology-driven companies
- In the coming years Technopolis is to become home for many Russian and international companies engaged in innovative hi-tech production across a range of industries, including:
 - ✓ Advanced Materials, Surfaces & Nanotech
 - ✓ MedTech, Medical Devices/Life Sciences
 - ✓ Microelectronics, Optics, Robotics, Automation
 - ✓ ICT Infrastructure;
 - ✓ Advanced Manufacturing



PAST AND PRESENT



BASICS AT A GLANCE

- **TECHNOPOLIS MOSCOW** is Russia's new innovative production hub
- 100% owned by the City of Moscow, flagship initiative of Mayor Sergei Sobyenin
- More than 330,000 m² (3.6 mio ft²) of industrial space located on 30 ha of land, including over 220,000 m² of fully renovated premises
- More than 33,000 m² (355,000 ft²) of office and service space
- Basic first-class infrastructure already in place (sufficient electricity, water, heat and gas supply)
- PLUG&PLAY facilities are being built for residents in technological clusters (microelectronics, life sciences, IT)
- Direct involvement in the innovation & technology strategy of the Moscow government
- Modeled on successful innovative industrial parks: Berlin Adlershof (Germany) and Grenoble Minatec (France)



TEAM

MANAGEMENT TEAM

- The project is run by a professional management team, capable of efficient execution of complex projects with particular expertise in such areas as: planning and construction, utilities infrastructure management, energy efficiency, security, investments, and client management
- Top managers come from large corporations and investment firms (RAO UES, MOESK, RUSAL, Renaissance Capital, SITRONICS)



BUSINESS DEVELOPMENT

- The **TECHNOPOLIS MOSCOW** business development team consists of 8 members in Moscow and 3 representative offices in Germany (covering Germany, Switzerland, Austria, and the Netherlands), France and South Korea
- Partner network searches for potential residents in the USA and Italy
- **TECHNOPOLIS MOSCOW** is a member of the Association of European Business (AEB), German-Russian Chamber of Commerce
- **TECHNOPOLIS MOSCOW** has built good working relationship with trade representations of the Russian Federation in various countries



RUSSIAN TEAM

- Russian business development team consists of professionals having extensive experience in investments and financial consulting, marketing strategy, communications, PR and BTL



INTERNATIONAL TEAM

- **AHP International** is one of Germany's leading private sector service providers in the field of international business development, trade and foreign direct investment promotion. AHP covers Germany, Austria, the Netherlands and Switzerland also acting as International Representative of the Department of Science, Industrial Policy & Entrepreneurship of the Moscow Government
- ✓ **Stefan Peikert**, Managing Director of AHP International. More than 20 years of independent consulting experience in the fields of strategic business development, internationalization, sales & marketing and investment
- ✓ **David Moock**, Consultant on Foreign Direct Investment Promotion at AHP. Wide experience in foreign trade and investment promotion



AHP  **INTERNATIONAL**

INTERNATIONAL TEAM

- **Salveo Group** is providing market entry services to support French companies in their export development towards Eastern European countries, India and Canada. Salveo helped more than 1 500 companies to enter the Russian market over the past 20 years. Salveo represents Technopolis in France, Belgium and Switzerland
- ✓ **Thierry LEPERCQ**, Vice President in charge of strategic projects. He has 20-year experience in aero and automotive industry, deep expertise in strategic projects and export strategy



INTERNATIONAL TEAM

- **Korea Business Services, Inc.** has been assisting overseas & domestic clients, both public and private, in promoting their products and services in Korea and abroad since 2000 in various sectors: information technology, chemical, biotechnology, pharmaceutical, environment, franchise, industrial machinery, electric and electronics, instrumentation, health and medical, renewable energy, and technology transfer
- ✓ **Ken Yang**, President. Over 25 years of experience in international trade, investment, economic & business development, market research, and financial advisory services both for private and public businesses



TECHNOPOLIS IAB

- In July 2013 the Moscow Government established the Innovation Promotion Council of Moscow, a high-level strategic advisory body, which includes representatives of federal agencies, as well as Russian and international experts on innovation development and support
- The Council was created with the aim of stimulating demand for innovative products in Moscow, as well as assisting in creation and development of innovation promotion infrastructure, such as technopolises, technology parks and special economic zones
- The Working Group of the Council on Technopolis Moscow was also created to provide the management access to the best practices of the global innovations market
- Members of the Working Group (IAB) shall bring in-depth expertise in target technology sectors, and promote **TECHNOPOLIS MOSCOW** worldwide as a reliable partner for global innovative businesses by ensuring transparency and stability and supporting an efficient open-minded enterprise



CURRENT IAB MEMBERS

- ✓ **Mr. Esko AHO, Chairman**, statesmen and former Prime Minister of Finland, Executive vice-president of NOKIA corporation
- ✓ **Mr. Andrei SHARONOV (TBC)**, one of the leaders of the **TECHNOPOLIS MOSCOW** project
- ✓ **Dr. Bertrand CAMBOU**, Chairman and CEO of Crocus Technologies
- ✓ **Dr. Werner CAUTREELS**, President and CEO of Selecta Biosciences
- ✓ **Mr. Bill HUTCHISON**, Chairman and CEO, Hutchison Management International, Executive Director of the Ernst & Young Center for Smart City Innovation in Moscow, a Co-Founder and Chairman of the i-CANADA Alliance
- ✓ **Mr. Joel MARCUS**, Founder, Chairman, CEO and President of Alexandria Real Estate Equities
- ✓ **Dr. Leonid MELAMED**, CEO of Composite Group
- ✓ **Mr. Joachim PLATE**, CEO of REHAU, Russia & CIS



CLUSTERS

CLUSTER DEVELOPMENT

TECHNOPOLIS MOSCOW uses cluster approach to the development of its territory that allows creating synergies among future residents within particular technological clusters

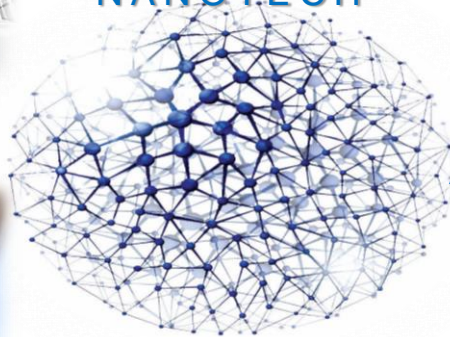
ICT



MICROELECTRONICS



NANOTECH



BIOTECH



ADVANCED MANUFACTURING



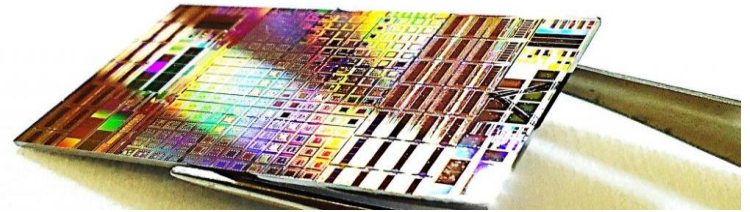
ADVANCED MATERIALS, SURFACES & NANOTECH

- ✓ **Prepreg – Advanced Composite Materials.** The first Russian-based facility that manufactures prepregs, designed for polymer composites, made of high-quality carbon and mineral fibers based on nano-modified and nano-filled polyimide and epoxy resins
- ✓ **Nanotechnology Center of Composites.** The Company was founded in 2011 for infrastructure and educational programs of Composite Group. The mission is to make composites irreplaceable in various industry sectors



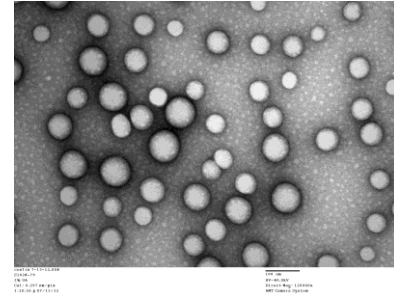
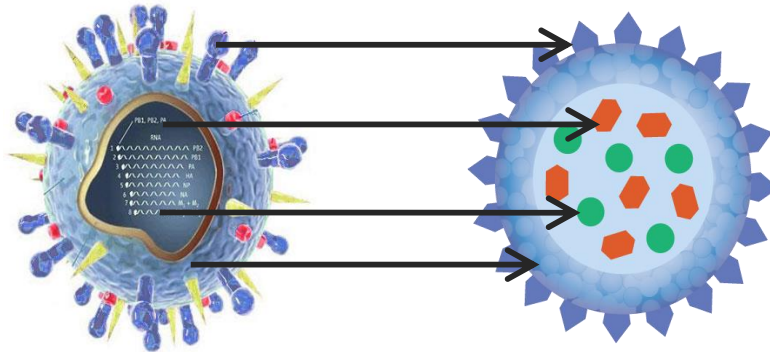
MICROELECTRONICS, OPTICS, ROBOTICS, AUTOMATION

- ✓ **CROCUS NANOELECTRONICS.** The company is building the most advanced magnetic memory wafer fab in the world, capable of high volume manufacturing of advanced MLU devices on 300-mm wafers based on Thermally Assisted Switching™ (TAS) MRAM technology at 90-nm and 65-nm nodes
- ✓ **MAPPER Lithography.** The company is working on a new, patented technology for making chips without a mask and using electron beams. The company's major innovation is the use of one system, through which more than 10,000 parallel electron beams can pass



MEDTECH, MEDICAL DEVICES/LIFE SCIENCES

- ✓ **Selecta Russia** is a wholly-owned subsidiary of Selecta Biosciences, Inc. founded in 2011 as a result of Selecta's partnership with Rusnano. The company's mission is to build a robust clinical pipeline of immunology-related therapies consisting of Selecta's proprietary Synthetic Vaccine Particles (SVP™) technology, and clinical stage compounds in-licensed from biotech and pharmaceutical companies



ICT INFRASTRUCTURE

- Technopolis is building special infrastructure for locating data storage facility (data-center). Over 12,000 m² (130,000 ft²) up to 20MWt facility aims at creating a reliable platform for providing “secure” cloud services (no Internet access required) throughout the City
- Other ICT residents:
 - ✓ **Business System Telehouse.** The company provides a wide range of telecom solutions, such as telephony, data communications access and data-center access
 - ✓ **Demos Internet.** One of the leading companies in information security market in Russia. At the Technopolis the company presents three different data-center technologies in a single facility, including cold, hot and liquid data-centers



ADVANCED MANUFACTURING

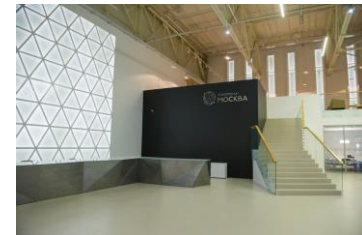
- All innovative producers are welcome to be a part of Technopolis' s eco-system. The AM cluster targets most of the technology transfer and localization projects
- Current residents in the cluster:
 - ✓ **LGM.** The company is an innovative enterprise specialized in designing and manufacturing of high-quality industrial pumps. LGM's pumps are used on submarines, as well as on nuclear power stations, in aerospace, petroleum and oil-refining industry, nuclear and chemical industry
 - ✓ **Research Institute of Communication and Control Systems.** The company is working on the creation of a field army communication system for the Armed Forces of the Russian Federation. The Company also works on the projects for system control automation for the Ministry of Defense



PROJECT DEVELOPMENT

ROLL-OUT TIMELINE: TODAY

- More than 220,000 m2 (2.3 mio ft2) of renovated industrial space (approx. 40% leased by target residents, another approx. 30% reserved)
- Engineering infrastructure fully in place
- Specialized customs post operational
- Modern congress center for high-level events is open
- Special tax regime operational
- First residents have started the production of innovative products



ROLL-OUT TIMELINE: 2014

- Two clusters (Plug&Play facility) come on-line: microelectronics, life sciences
- Intra-logistics center
- Chemical storage area
- More than 7,000 m² (75,350 ft²) of renovated office space
- Renovated facilities mostly filled with innovative manufacturing
- Complex landscaping begins



ROLL-OUT TIMELINE: 2015

- Up to 110,000 m2 (1.2 mio f2) of additional renovated industrial space including:
 - ✓ 12,000 m2/20 MWt (130,000 ft2) data-center
 - ✓ 8,000 m2 (86,000 ft2) intra-logistics center
- Up to 30,000 m2 (323,000 f2) of additional renovated office and service space
- Service infrastructure operational
- 18,000 m2 (194,000 f2) startup block
- All facilities mostly filled with innovative manufacturing and services
- Complex landscaping
- Concept of development of surrounding territory



SERVICE INFRASTRUCTURE

- Service infrastructure of **TECHNOPOLIS MOSCOW** will include the following services offered to the residents:
 - ✓ Technological services: hourly access to clean rooms, labs and experimental complexes, both on the territory of the TM and in partner research centers
 - ✓ Corporate services: legal and accounting, recruiting, company registration, visa services, etc.
 - ✓ Consulting on corporate procedures, business processes, technology commercialization, fund raising, etc.
 - ✓ Operation and logistics services: engineering, warehouse management, customs, leasing, etc.
 - ✓ Co-financing by partner funds and banks
 - ✓ International trade and cooperation support through partner organizations worldwide



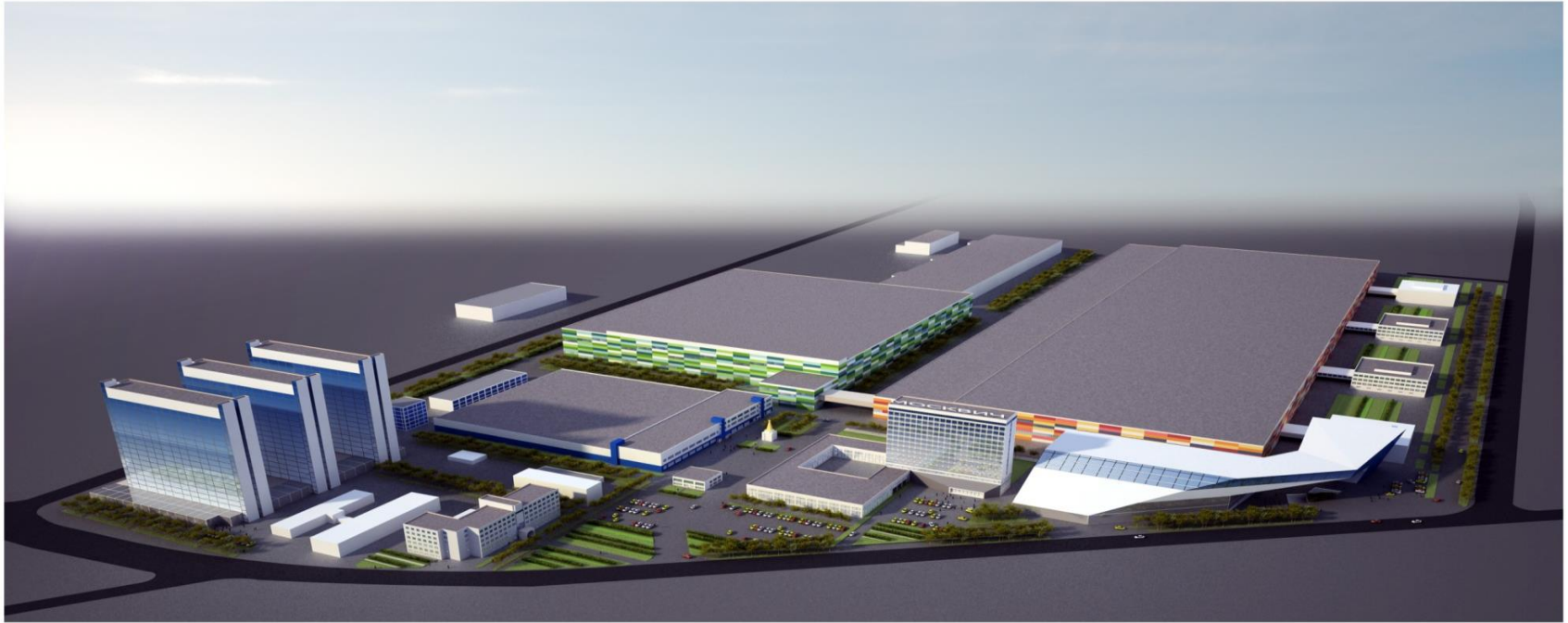
SUMMARY

KEY ADVANTAGES

- Moscow location: easy access to infrastructure and skilled labor
- Absence of the most common barriers to manufacturing roll-out (cadaster registration, complicated building permits, difficulties with obtaining technical conditions)
- Most advanced stage of readiness of any major industrial facility in Moscow
- Virtually unlimited supply of electricity and other utilities
- PLUG&PLAY facilities for technological cluster participants
- Good mix of potential partners with synergies in clusters
- Income tax 15.5% (instead of 20%) - effective from 2013
- Customs duties and other tax privileges are being discussed
- Participation in the variety of the Moscow programs, simplified cooperation with government institutions
- Maximum transparency & safety of the investment



TECHNOPOLIS TOMORROW



TECHNOPOLIS
MOSCOW



Business
System
Telecom



ПРЕПРЕГ
ХОЛДИНГОВАЯ КОМПАНИЯ КОМПОЗИТ



**CROCUS
NANO
ELECTRONICS**



CONTACT US

Technopolis Moscow

Phone +7 495 647 0818

www.technomoscow.ru

TECHNOPOLIS

MOSCOW

THE FUTURE IS MADE HERE

