Sustainable Investing in the Russian Federation – The Role of Venture Capital

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President of Russian Venture Capital Association (RVCA) & General Director of Management Company «SBERINVEST»
The policy framework of the Russian Federation on sustainable development covers all three aspects – economic, social and environmental.

New objectives for social and economic development - to increasing the level and quality of life in Russia, are contained in key documents:

- the Principles of the state policy on environmental development of the Russian Federation 2030,
- the Concept of long term socio-economic development of the Russian Federation 2020,
- the Decrees of the President,

That accompanied with **Energy strategy 2030** are followed by

- **Strategy for innovation development 2020** and
- **Priority directions of development of science, technologies and technics in the Russian Federation.**
Priorities in innovations vs Sustainable development in Russia

Key aspects of Sustainable development

- Economical
- Social
- Environmental

Priority directions of development of science, technologies and technics in Russia

- The security and counter-terrorism
- Life sciences
- Rational environmental management
- Energy efficiency, energy conservation, nuclear energy
- Nano systems
- Information and telecommunication systems
- Transport and space systems
RUSSIAN INNOVATION ECOSYSTEM: financial aspect

Development institutions “Innovation lift”

- RUSNANO
- Vnesheconombank (VEB)
- Moscow Exchange: Sector for innovation and tech-companies

Company size, mln.rubles
- 1000
- 500
- 100

Co-financing by Private capital, % (min)
- SEED: 25%
- START-UP: 50%
- GROWTH: 50%
- EXPANSION/M&A: 50-75%

- VEB-Innovation* Fund (Public VC)
- Russian Venture Company (RVC) Funds (PP VC)
- SKOLKOVO Foundation (granting program)
- Foundation for industrial development (credit instruments)
- RVC Seed Fund (Public VC)
- Regional Venture Funds (PP VC Funds)
- FASIE (granting programs)
- Russian Bank for SMEs support

*) Provides capital to SKOLKOVO residents only
RUSSIAN INNOVATION ECOSYSTEM: financial aspect

Key financial source for innovations in Russia

- Federal programs for research and development
- R&D budgets of corporations
- Development institutions
- VC funds
  - private VC funds
  - public-private VC funds (PP VC Funds)
- Open market – Moscow Exchange, Sector for innovation and technological companies

Support from state, municipal programs for innovations and Development institutions available to projects that meet Priority directions of science, technologies and technics development in Russia.
Technology platform (TP) - a communication tool to strengthening the efforts for development of advanced commercial technologies, new products (services), to attract additional resources for R&D, to improve the regulatory legal base for scientific-technological and innovative development.

Key stakeholders of TP

The 34 Technology platforms (TP) bring together more than 3000 participants. Each TP develops a Strategic Research Program of certain technology areas. Since 2014 most PPP should be supported by TP to obtain finance from public. TPs are considered by the Government as a tool for promotion of SDG along with other goals.
VC & PE statistics:
Volume and number of VC&PE funds

Capital of VC&PE funds, $ bln.

<table>
<thead>
<tr>
<th>Year</th>
<th>VC funds</th>
<th>PE funds</th>
<th>Total</th>
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<tr>
<td>2008</td>
<td>14.3</td>
<td>11.9</td>
<td>26.2</td>
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<td>2009</td>
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<tr>
<td>2013</td>
<td>28.9</td>
<td>5.5</td>
<td>34.4</td>
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<tr>
<td>2014</td>
<td>30.5</td>
<td>5.6</td>
<td>36.1</td>
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<tr>
<td>I.2015</td>
<td>30.5</td>
<td>5.8</td>
<td>36.3</td>
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</table>

Number of VC&PE funds

<table>
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<tr>
<th>Year</th>
<th>VC funds</th>
<th>PE funds</th>
<th>Total</th>
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<tbody>
<tr>
<td>2008</td>
<td>155</td>
<td>75</td>
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<td>2009</td>
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<td>2014</td>
<td>347</td>
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<td>463</td>
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<tr>
<td>I.2015</td>
<td>362</td>
<td>116</td>
<td>478</td>
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</table>

VC funds share by capital – 19%
VC funds share by number – 68%
VC statistics:
public-private VC funds

PP VC funds provide more than 1/3 of total VC investments to Russian startups, while the industry develops and share of private capital VC funds grows.
VC&PE statistics: Total volume and number of investments

<table>
<thead>
<tr>
<th>Year</th>
<th>Total volume of investments, $ million</th>
<th>Number of investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1472</td>
<td>120</td>
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<td>2009</td>
<td>507</td>
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<tr>
<td>2011</td>
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<tr>
<td>2013</td>
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<tr>
<td>2014</td>
<td>1305</td>
<td>233</td>
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<tr>
<td>2015</td>
<td>301</td>
<td>79</td>
</tr>
</tbody>
</table>

Since 2008 there is a positive change in structure of VC funds investments by development stage of portfolio companies – by med 2015 VC funds invest less on average but in more companies and bigger portion in companies of early stages (seed and startup).
The huge disproportion — more than 93% of total VC investments are in IT & Communications in 80% of total companies supported by VC funds.
VC statistics:
VC funds technological sectors preferences

<table>
<thead>
<tr>
<th>Sector</th>
<th>Preferences of VC funds</th>
<th>Preferences of new VC funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ICT</td>
<td>27.5%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Mixed</td>
<td>24.8%</td>
<td>18.8%</td>
</tr>
<tr>
<td>ICT</td>
<td>47.7%</td>
<td>68.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector</th>
<th>Preferences of PPP-VC funds</th>
<th>Preferences of new PPP-VC funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ICT</td>
<td>31.5%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Mixed</td>
<td>61.1%</td>
<td>60.0%</td>
</tr>
<tr>
<td>ICT</td>
<td>7.4%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

PP-VC Funds fill the gap of financing for non-IT companies. While the share of new private VC funds grow faster than PP-VC Funds since 2012.
Portfolio companies of Russian VC funds in clean-tech (examples)

**AT Energy** is a high-tech company that develops advanced proton exchange membrane fuel cell technologies. Fuel cell is an electrochemical device that transforms hydrogen energy into electricity and does not require inefficient combustion processes for such transformation. Key benefits of fuel cells are high efficiency, long life cycle, ecological and quiet operation.

**Siluria Technologies** is pioneering the commercial production of fuels and chemicals made from clean, abundant natural gas. Siluria’s breakthrough Oxidative Coupling of Methane ("OCM") process technology is believed to be the first commercially viable process to directly convert methane to ethylene. Siluria’s second process technology can convert ethylene to liquid fuels such as gasoline, diesel or jet fuel.

**Edeniq** is a biomaterials and sustainable fuels innovator. The firm integrates patented mechanical and biological processes to efficiently and cost-effectively break down plant materials into sugars that become sustainable fuels and industrial materials.
KDK is a high-tech company that develops advanced rice husk recycling technology. The company produce natural, clean, pure silica dioxide using eco-friendly processes and solve the problem on utilization of rice husk and is demanded in all rice-production regions.

ChimtechEngineering is pioneering the technology for the production of plasticizer DOTP on the basis of the by-products of chemical production is waste-free and allows to get a quality product and dispose of industrial waste. DOTP substitutes the widely used currently but restricted as toxic chemicals in EU and some other regions dioctyl phthalate (DOP).

BioInnova is involved in production of renewable fuels from non-food seeds oil and develops olio-chemistry technologies. The company support the agree-suppliers in sustainable production technics for their renewable raw materials. The company focuses on material efficiency and seeks the ways for total processing of the raw materials into new products with high add-value.

CIT focuses on advanced technologies for material efficiency and clean recycling of coal power stations waist (ash) into add-value products.
Prime issues on the role of VC in sustainable investing

• Sustainable development goals could be achieved only by implementing innovations.
• Venture capital is an important instrument of financial support for innovations.
• Private-Public VC Funds are the tool to promote Investments in Sustainable Development.
• Public partner is responsible for the SDG component, while Private partner is responsible for the profit component.
Thank you for attention!

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