



# **Innovation in Support of National Strategies for Sustainable Development: the Case of Kazakhstan**

**Rafis Abazov**

Director, MDP Global Classroom, Kazakhstan

**Zhumatay Salimov**

Deputy Chairman of the Board

National Agency for Technological Development

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# 1) Kazakhstan's national strategies for sustainable development & innovations;



# SDGs: Policy setting in Kazakhstan

The early 2000s the government of Kazakhstan has been among strongest advocates for the UN-led post-2015 consultations and supporters of the development of the UN 2030 Agenda for sustainable economic development and strong social policies addressing problems of poverty, gender inequality and other issues. The government also prioritized support for innovations to reduce dependency on energy exports and unsustainable energy consumptions

The government of Kazakhstan expressed its vision on sustainable development in three major national strategies

- 1) Kazakhstan strategy of development 2050 (before that Kazakhstan-2030);
- 2) Industrialization concept 2015 – 2019 State Program of Accelerated Industrial and Innovative Development (SPAIID) 2015-2019;
- 3) PLAN OF NATION - 100 Steps on Implementation of Five Institutional Reforms.

# Formulation of policy strategies in Kazakhstan

- 1) The national strategies and policy priorities for Kazakhstan has been developed in consultation with major local and international stakeholders;
- 2) The NIF/NATD has been among key-stakeholders who helped to formulate policy priorities for supporting innovations and innovation-friendly environment;
- 3) Major stakeholders including the UNECE has worked together to promote policy in support of innovations and sustainable development

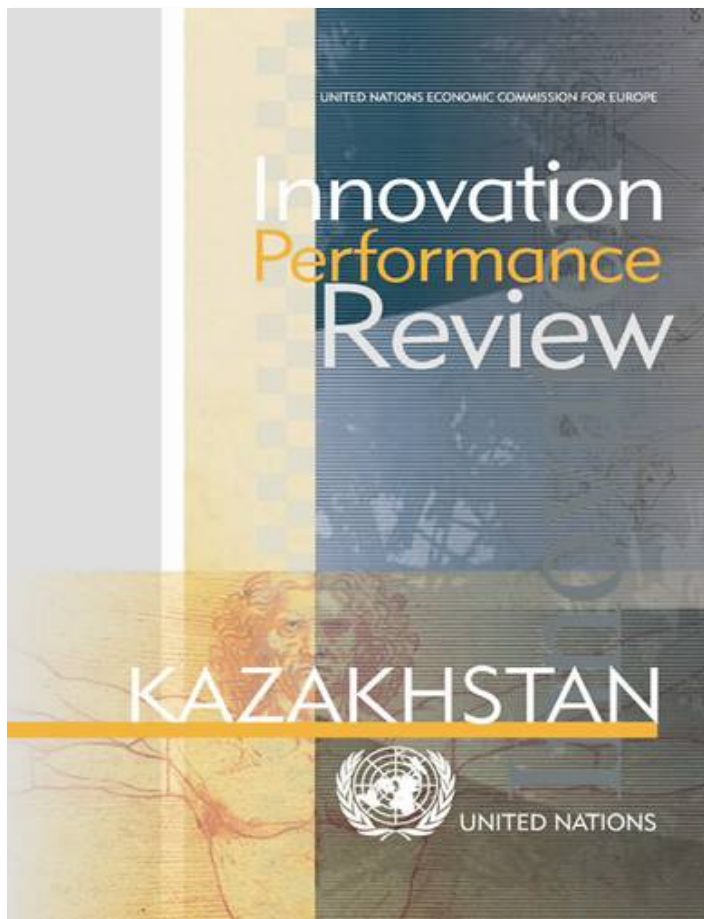
## 2) UNECE: Kazakhstan - Innovation Performance Review 2012: research and outcomes



# Collaboration with the UNECE

- Consultations with government agencies;
- Consultations with NGOs & civil society;
- Consultations with academia
- Consultation with business





- **The Review of UNECE is conducted together with Government of the RK**
- **International experts from European countries were involved during the Review (Austria, United Kingdom, Germany, Greece, the Netherlands, Finland, Czech Republic)**
- **More than 40 key organizations of Kazakhstan were involved**  
(Administration of the President of RK, The Prime-Minister's Office of RK, ministries and agencies, national holdings and companies, scientific and development institutions, branch associations, companies and universities)
- **The document presents the critical review of the National innovation system and the bases of innovational policy**
- **The Review provides the specific recommendations on 7 directions for policy in the field of innovations**

## 1.-2. National Innovation System and innovation policies

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- **The State Program of Kazakhstan Industrial-Innovative Development for 2015 - 2019 years is adopted (August 1, 2014)**
  - the main directions of the innovation policy in the priority sectors of the economy were defined
- **Entrepreneurial Code is adopted (January 1, 2016)**
  - all the provisions of the law that regulates the innovational activity are included in the code, the level of which is above the laws
  - types of innovation grants are aggregated from 9 to 3
- **A separate law "On the commercialization of scientific and technological activities" is adopted (October 31, 2015)**
  - a separate grant for commercialization of RSTA is provided, rules on intellectual property are included, roles of government agencies, universities, research institutes and etc. are regulated
- **Council for Technology Policy runs at the Ministry for Investment and Development**
  - it was transferred from the Government level to the ministry level to increase mobility
  - the Council will decide on the financing of large-scale innovative projects
- **The methodology of formation of regional innovation systems is developed (the methodology was presented to UNECE experts at a special seminar)**
  - Today regional offices of innovation are being established in the regions - Shymkent Innovation, Atyrau Innovation, Aktobe Technopark, Pavlodar Technopark and others.

### 3. Knowledge Generation

- **State Program of the Development of Education and Science for years 2016-2019 (March 1, 2016) endorsed**
  - essential directions and priorities of education and science development were defined
- **Research Institutes Formation**
  - Creation of innovative research cluster of Nazarbayev University is one of the key projects. As of now, Astana National Laboratory, NU Research and Innovation Systems and Centre of Life Sciences are established at the premises of Nazarbayev University.
  - NU Research Institute formation experience was extended to other national universities KBTU, ASTU, KazNU.
- **Nazarbayev Intellectual Schools were opened in all regions of the country**
  - NIS have a special status of Autonomous Education Organization
  - UK and US experience is applied during the formation of the curriculum
- **Bolashak program development**
  - Abroad training system for enterprise employees is implemented (up to 1 year)
  - To obtain Master's Degree at a foreign university 2 years of work experience is required





## 5. – 7. Institutes for development, support tools, international integration

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- **Innovation grants for technological development of operating enterprises, branch, commercialization of technology are provided**
  - grants are provided from 600 thousand \$ to 2,5 million \$ on condition of co-financing
- **Obligatory co-financing of business with grant support for scientific projects of research institutes and universities are being implemented**
- **In partnership with World Bank the project for development of product innovation (the second project after commercialization of technology) is realized**
- **Every year acceleration programs for start-ups are organized**
  - only in 2015 345 applications from 16 countries were collected, the top 7 participants were trained, including in Silicon Valley (USA)
  - this year «Start-up Kazakhstan» program is developed
  - besides government support, private initiatives for the support of start-up projects are developed
- **Kazakhstan takes part in program of European Union «Horizon – 2020».**
  - announced 5 projects from Kazakhstan
- **Analytic database about innovation is formed, which includes the projects of different ministries and institutes for development:**
  - 297 enterprises, 4195 innovation projects, 256 technological tasks, 556 experts, 297 innovators, 734 technology passports и others.

# 4) Development of Industry-Science linkages through the development of technoparks at education institutions in Kazakhstan



# Industry-Science Linkages in Kazakhstan

1. Implementation of targeted technological programs aimed at solving industry problems (consortia: companies + science);
2. Reformatting the grant program of science - compulsory co-financing on the part of business;
3. Creating platforms for interaction between industry and science - innovation clusters

# *The development of technoparks*

- 8 technoparks in 5 regions of Kazakhstan were created. Of these, 4 technoparks created in collaboration with universities, involving 3 local executive bodies. 1 industrial park was created on the territory of SEZ.
- Through industrial parks 116 projects for a total of \$6 million (1 bln. tenge) were supported
- Annual sales of the companies - \$ 500 000 per year (160 mln / year).
- \$ 400 000 (125 million tenge) of taxes



# Technoparks and innovations in support of national strategies: plans and realities in Kazakhstan

- ✓ Further development of two innovation clusters - Nazarbayev University and the Park of innovative technologies
- ✓ Attracting private investments in the development of technology parks

Despite the progress made in the development of technology parks and innovation in general, comparative international statistical data suggests that we have to do more:

- Innovation activity of enterprises is still low, only 8.1% in 2014
- The volume of innovative products was 1.5% of GDP in 2014
- The export of high-tech products was about \$3billion in 2013

## 5) Recommendations

- **Venture financing of projects isn't developed, respectively ,the indicator of investments attraction into innovations remains low**
- **The opportunities of the international exhibition EXPO 2017 are not used to the full extend**
- **How to use the capacity of the International financial center Astana**
- **What conditions are necessary for attraction of startups and experts (creation a hub startup) considering a political and economic situation in the region**
- **There is a duplication of functions between government bodies and institutes on support of projects**
- **What is the role of regions, what instruments of support have to be on local levels**



# Agenda and action plan for the future work on innovations & PPP in Kazakhstan

- 1) Taking into considerations current international trends we have to mobilize innovation in support of national sustainable development program;
- 2) Taking into consideration the regional trends in Central Asia and Caucasus we need expertise from UNECE in order to conceptualize Kazakhstan's experience for deepening integration and collaboration in the Central Asian region in the issue of innovations for sustainable development;
- 3) Taking into consideration of that one of the priorities of Kazakhstan is EXPO-2017 (future of energy (SDG-07)) we would like to invite UNECE and all interested parties to work with us on the EXPO-2017

# *Thank you for your attention*

## *Q&A*

