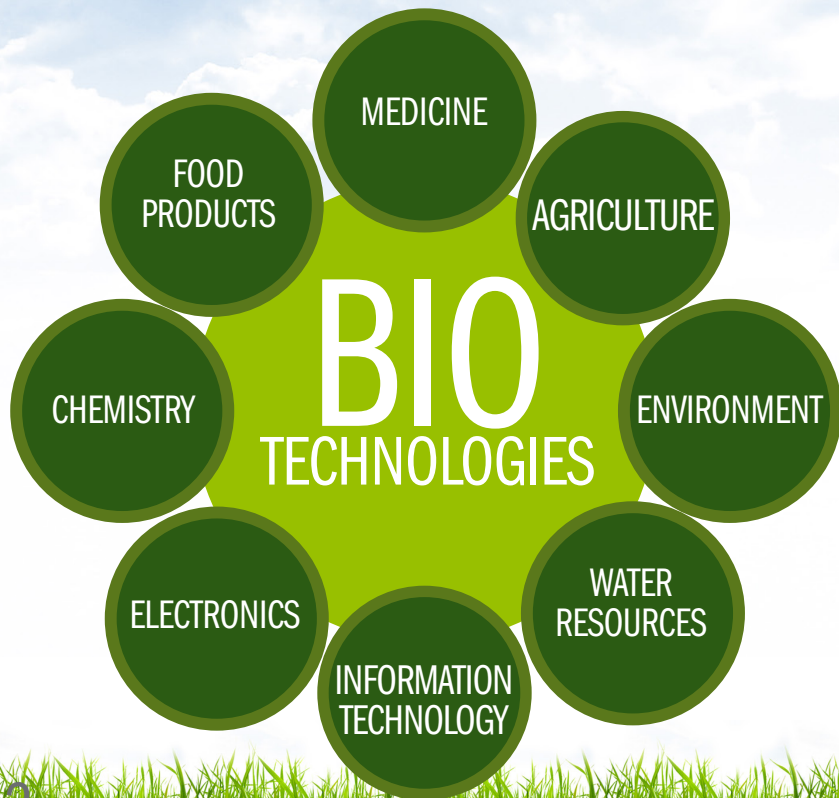




SAMARA REGION – THE PLACE FOR BIO-INNOVATION!

MINISTRY FOR ECONOMIC DEVELOPMENT, INVESTMENT AND TRADE
OF SAMARA REGION, RUSSIAN FEDERATION

BIOTECHNOLOGIES EVERYWHERE



Bioproducts, «Healthy Foods»

Biochemistry, chemicals from renewable sources

Biopharmaceuticals, medicine of the future

Competences of Samara Region

Agricultural biotechnology

Bioremediation, bioenergy, industrial biotechnology

BIO IT

AQUA BIOTECHNOLOGY

DECISION MAKING TRENDS IN THE SPHERE OF BIOTECHNOLOGY IN SAMARA REGION

TRENDS

Growth of agricultural produce: crop breeding by 2 times within 5 years and cattle breeding by 3 times

Depletion of soil

Development of Samara and Togliatti agglomeration (largest in Russia), automobile, petrochemical and air & space industry

Growth of automobile manufacture up to 1040 Ths units p.a., more stringent recycling requirements

Energy consumption of traditional energy resources

FUTURE TECHNOLOGIES

Processing of agricultural production waste to feedstock, biogas, organic fertilizers

Humus production technologies, disposal of pesticides and other chemical substances in soil

Technologies regulating the life of microorganisms in the biosphere to protect the environment

Non-toxic biodegradable polymers

Environmentally friendly energy generation

POTENTIAL MARKETS*

KEY SPHERES	2011, \$ bln. (World)	2016, \$ bln. (World)	Russia,% (2011(10))	Russia, % (2016)
Bio-pharmaceutics	176	265	1.4	1.5
- cell technologies	63	96,3	-	0,02
- gene technologies	2,2	9,6	-	0,1
- biocompatible materials	2,4	4,2	2	1,9
- biomarkers	14,9	33,3	0,6	0,4
Agro Biotechnologies	13.5	15.1	3.7	5.4
- veterinary drugs	4,8 (2010)	5,6	4,4	5,3
- feeding probiotics	0,6 (2010)	0,9	3,3	4,4
- amino acids	2,3 (2010)	2,8	5,8	9,5

Complex program of biotechnology development in Russia up to 2020.
Estimated financing: 33 bln. dollars

POTENTIAL MARKETS 2*

KEY SPHERES

	2011, \$ bln. (World)	2016, \$ bln. (World)	Russia,% (2011(10))	Russia, % (2016)
Industrial biotechnologies	9.8	13	2.1	2.6
Bio-chemistry				
- renewable chemicals	41.3 (2010)	76 (2015)	-	1.05 (2015)
- bio-polymers	3.3 (2010)	4.9	-	0.15 (2015)
Bio-energy development	70	120	-	2.8

Complex program of biotechnology development in Russia up to 2020.
Estimated financing: 33 bln. dollars

Samara State Medical University, Samara State Air and Space University, "Geatolog" Medical Company LLC, Scientific Production Union "Fenix-Med" LLC, "Kombis" LLC, "Dental Implants" LLC, "SKP-Samara" LLC, "Bioceramica" LLC, "Liocell" LLC, "Sinergia" LLC, "StroyProspekt", "Synergy" LLC

DIAGNOSTIC
TOOLS AND CELL
BIOTECHNOLOGY

FOOD
BIOTECHNOLOGY

State Scientific Company Samara Research Station of the National Agricultural Academy, Samara State Technical University, "Samara BT", "NIEL" LLC, "SPK" LLC

Samara State Academy of Agriculture, Federal Unitary Enterprise "Ecology", CJSC "Eurotechnica"

BIOFUEL

SAMARA REGION BIO-TECHNOLOGY GROUP

BIOTECHNOLOGY
FOR THE PROTECTION
OF ENVIRONMENT

Samara State Academy of Agriculture, Federal Unitary Enterprise "Ecology"







Samara State Academy of Agriculture, "Plodar" LLC, "Zarechye 2" LLC

BIOTECHNOLOGY
FOR AGRICULTURE

MEDICINES

Samarra State Medical University; Samara Research Veterinary Station; State Scientific Company Samara Research Institute named after Tulaikov; Samara Region budgetary enterprise Research Institute of gardening and medical herbs "Zhigulevskie Sady"; "Ginseng Nursery" Farm Company; CJSC "Samaralektrav"; "SPK" LLC; Scientific production company "POICK"; "OZON" LLC, "Parnapharm", "Pharmpol-Volga"

CHAIN OF BIOTECHNOLOGY PRODUCTS

Science and Education	Innovative centers, institutes and laboratories	Products	Customers
 Samara State Medical University	Institute of Experimental Medicine and Biotechnology	Over 100 LIOPLAST implants	Medical institutions in 40+ cities of Russia and foreign clinics
 Samara State Technical University	Food Production faculty	Beer with increased content of physiologically active substances	Public catering
 Samara State University	Center for Biotechnology and Bioengineering		
 Togliatti State University	Institute of Chemistry and Environmental Engineering		
 Samara State Air and Space University	“Biotech and radioelectronic systems” Scientific research laboratory	Pulse/oxymeters, phythm/heart rate monitor, pacemaker, diagnostic tools	Medical institutions, pharmacies
 Academy of Agriculture	Faculty of biotechnology and veterinary medicine		

SAMARA REGION: SUMMARY

territory
53 600 sq. km
3 171 400
population

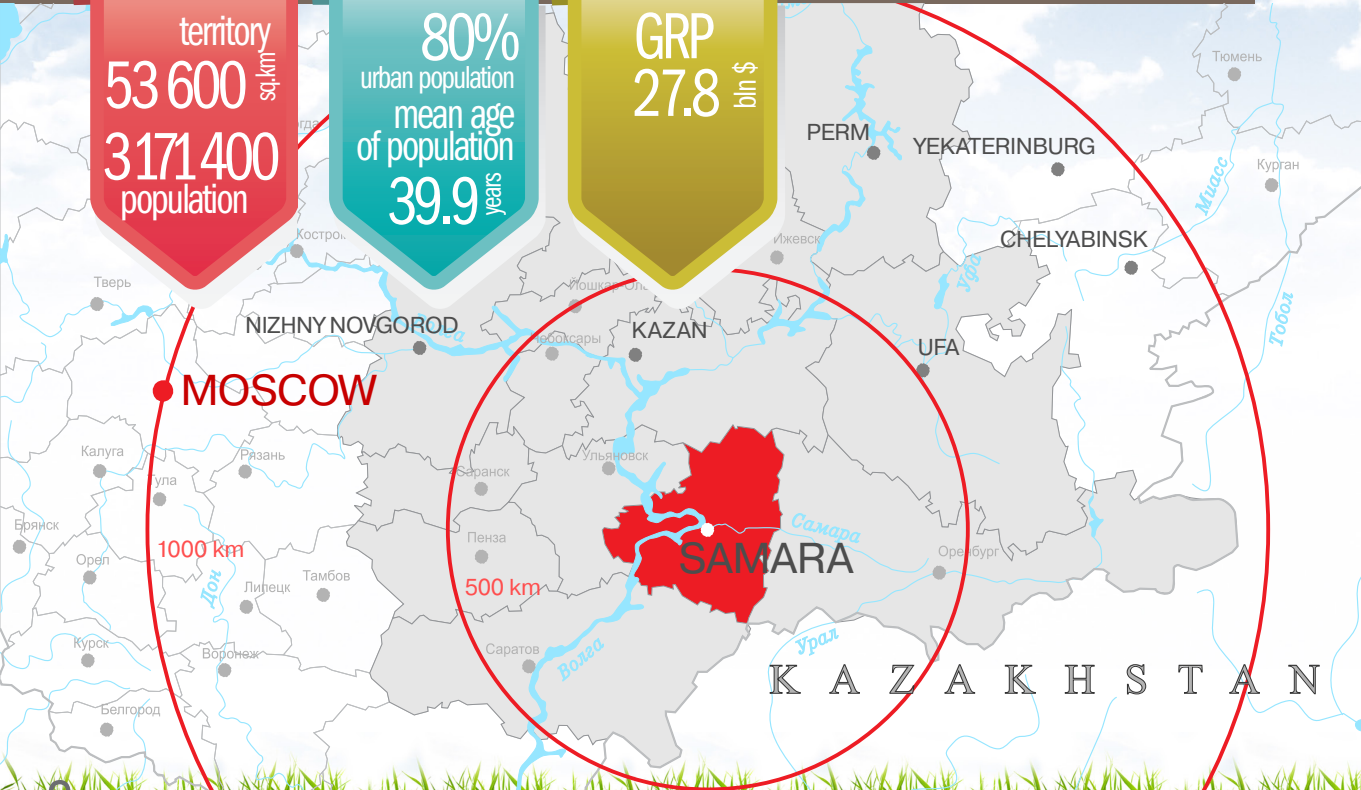
80%
urban population
mean age
of population
39.9 years

GRP
27.8 bln \$

- 760 thousand hectares of forest,
- Rich water resources with 2 largest rivers: Volga and Samara
- 37 thousand square kilometers of agricultural production
- We do Differ for the Better!
- Samara Region is an excellent site for BIO-innovations

1500 square km of Samara Region is urbanized

49500 square km is the resource base for biotechnology



SAMARA REGION: “GREEN CORRIDOR” FOR INVESTORS

SAFE INVESTMENTS AND ADMINISTRATIVE SUPPORT TO INVESTORS IN SAMARA REGION

Progressive
legislation

Transparent status
of land plots

Administrative
support to investors

SPECIAL CONDITIONS IN THE FREE ECONOMIC ZONE

Savings on
infrastructure con-
nection (up to 30%)

Free customs
regime

Zero tax rate
(property, transport,
land)

“Social” tax **14%**
up to 2017

2% income tax

SPECIAL CONDITIONS FOR MONOINDUSTRY TOWNS

- We pay for each created job
- We exempt from property tax up to 7 years
- We lower company income tax for up to 5 years

“ZHIGULI VALLEY” TECHNOPARK

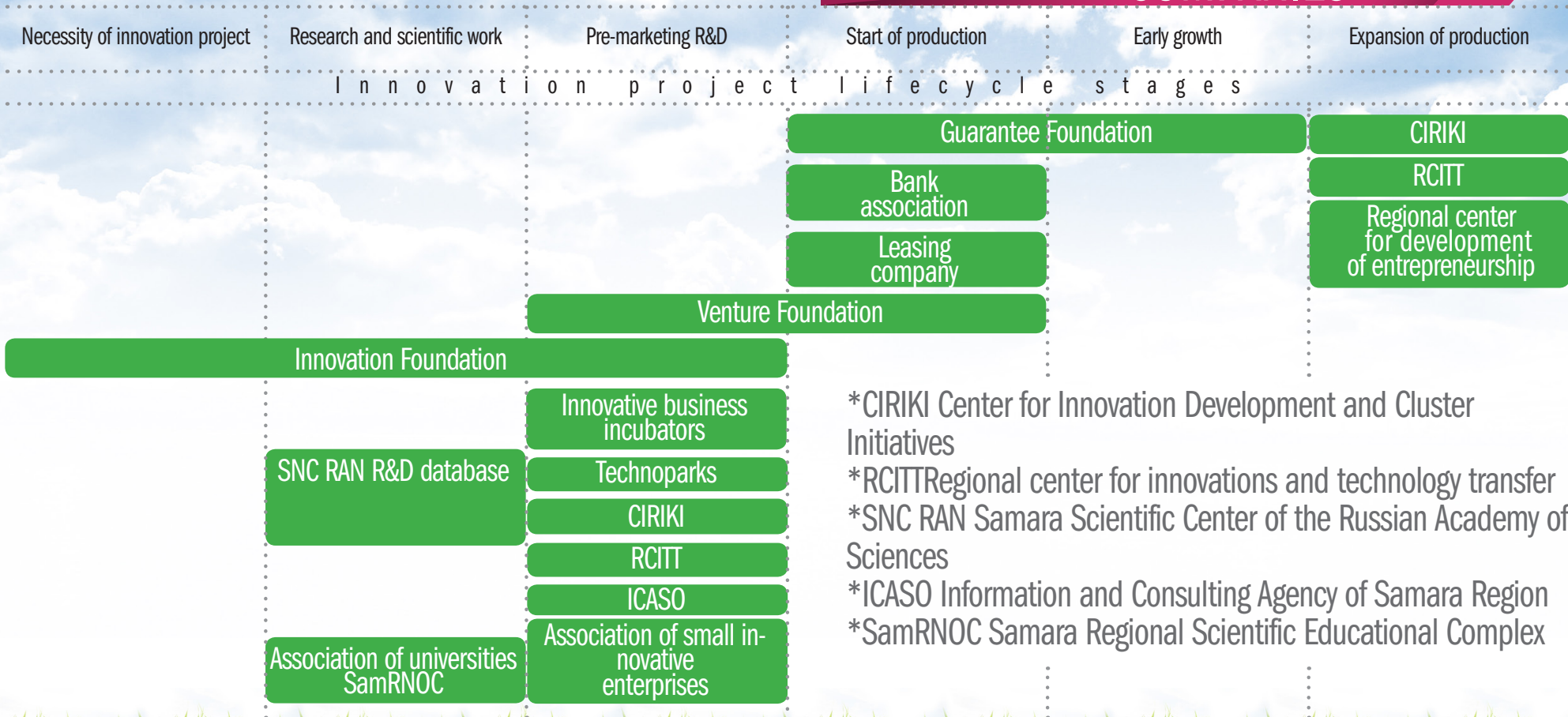
Regional
Tax Benefits

Modern Infrastructure
and Equipment

INNOVATIVE LIFT FOR

BIOTECHNOLOGY

COMPANIES



*CIRIKI Center for Innovation Development and Cluster Initiatives

*RCITT Regional center for innovations and technology transfer

*SNC RAN Samara Scientific Center of the Russian Academy of Sciences

*ICASO Information and Consulting Agency of Samara Region

*SamRNOC Samara Regional Scientific Educational Complex

TECHNOPOLIS



UNIVERSITIES:

Academic buildings
R&D laboratories
Residential complex
for students and
teachers



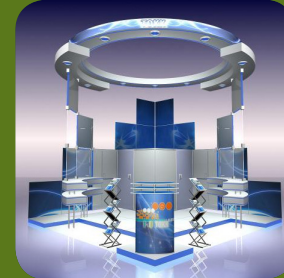
INNOVATIONS:

Technopark
Premises for Shared
Service Research Center
Offices and laboratories
Innovative
business-incubator



SERVICE COMPANIES:

Innovative technological
centers
Office premises



EXHIBITION:

Exhibition center with
congress-hall, hotels &
business center



SOCIAL INFRASTRUCTURE:

Shopping center
Sports complex
(including facilities for
FIFA 2018)
Entertainment centers
Recreation zones

STAFF POTENTIAL OFFERED BY SAMARA REGION FOR BIOTECHNOLOGY SPHERE

**Samara State
Medical University**
9 specializations 71 department

Samara State University
3 specializations 5 department

Togliatti State University
4 specializations 1 department

**Volga State Academy of
Social Sciences and
Humanities**
4 specializations 1 department



**Samara State
Technical University**
6 specializations 6 department

**Samara State Academy
of Agriculture**
5 specializations 5 department

**Samara State Architecture
and Construction University**
1 specializations 2 department

**Samara State
Air and Space University**
3 specializations 2 department

KEY SECTORS FOR COOPERATION:

THE SHARE OF RUSSIA
IN THE INTERNATIONAL MARKET
OF BIOTECHNOLOGIES IS 0.1%

BIOMEDICINE

Cell biotechnology,
Personalized medicine, Modern
diagnostic tools,
Biocompatible materials, BIO IT

INDUSTRIAL BIOTECHNOLOGY

Biodegradable polymers, Production of
industrial ferments, Production of amine
and lactic acids, Production of biologically
active food supplements

AGRICULTURAL BIOTECHNOLOGY

Processing of agricultural production
wastes (biogas, organic fertilizers),
deep processing of plant cultures,
Biopreparations for cattle farming

BIOENERGY

Production of 'clean' energy, Production of
biofuels, Power-generating waste recycling

FOOD BIOTECHNOLOGY

Ferment preparations, Probiotics,
Prebiotics, Synbiotics, Functional food
products, deep processing of foodstuffs

FOREST AND ENVIRONMENT BIOTECHNOLOGY

Regulation of life of microorganisms in the
environment (bioremediation), biological
tools of forest protection, environmentally
friendly housing

WE ARE READY TO WORK WITH INVESTORS IN ALL SECTORS OF BIOTECHNOLOGY!



WELCOME TO SAMARA REGION!

Ministry for Economic Development,
Investment and Trade of Samara Region