



SIBUR



EXPERIMENTAL

CARBON POLYGON OF UNIVERSITY OF TYUMEN

SCIENTIFIC-METHODOLOGICAL CENTER
AND EDUCATIONAL HUB

MORE THAN **60%**
WORLD GDP



- EU, USA – by 2050, China – by 2060



- EU to phase out coal and oil by 2050
- US will create 5 million new jobs in green energy and phase out hydrocarbons as well



- In the EU, such a system has been developing since 2005
- USA evolves from regional to national ETS



- EU starts levying carbon taxes on imported goods from 2023
- USA also plans to introduce such fees

7 PILOT CARBON FACILITIES IN THE RUSSIAN FEDERATION

FEDERAL PROGRAM "CARBON", INITIATIVE OF THE MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION



FIRST CARBON POLYGON IN KALUGA



KALUGA REGION
INDUSTRIAL PARTHNER: CTRL2GO
22 SEPTEMBER 2020

WESTERN SIBERIAN MERIDIONAL MEGATRANSECT: MONITORING CLIMATE AND ENVIRONMENTAL CHANGE



STATE REGIONAL RESERVE "GUZENEEVO"

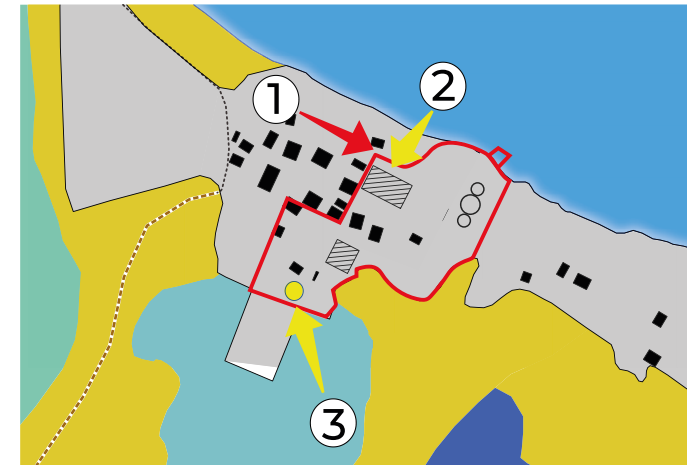
CARBON POLYGON OF UNIVERSITY OF TYUMEN



ECOSYSTEMS

- Anthropogenic
- Small-leaved-conifers
- Small-leaved
- Lowland swamps
- Transitional swamps
- Light coniferous forests
- Coniferous-small-leaved
- Conifers

BIOSTATION

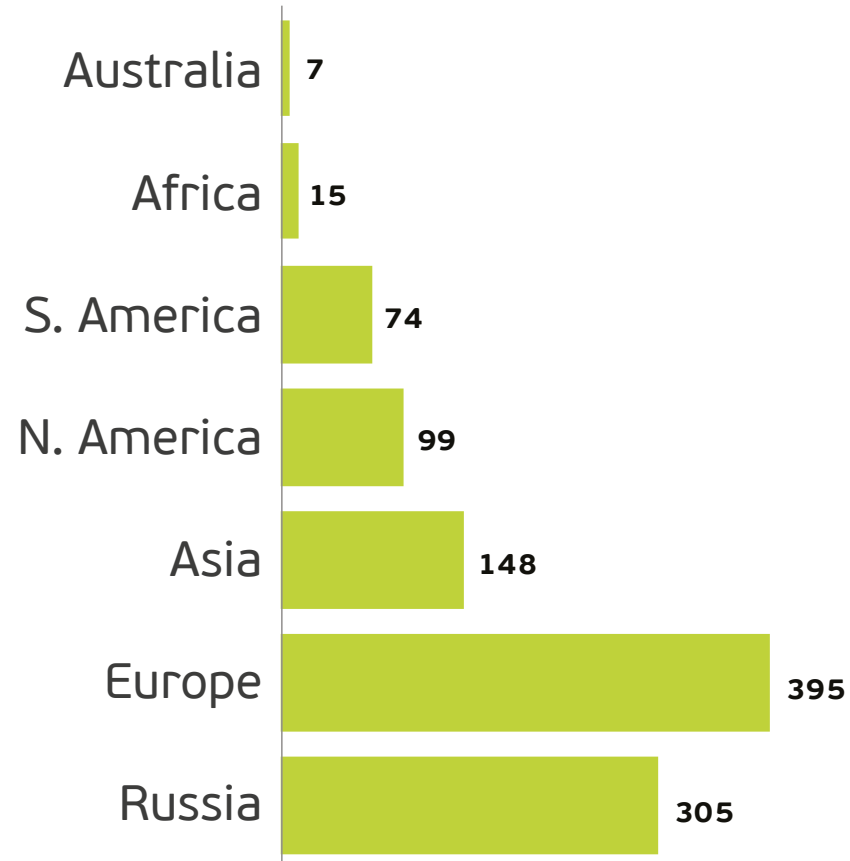


1. Biostation
2. Experimental plot
3. Mast

COLLECTION OF PLANTS GENETIC RESOURCES OF TYUMGU BIOSTATION ON LAKE KUCHA



COMPOSITION OF GRAIN COLLECTION



INSTITUTE OF PLANT
INDUSTRY NAMED
AFTER VAVILOV

OPEN CEREMONY OF CARBON POLYGON





CARBON POLYGON KUCHAK



VORTEX PULSATION SYSTEMS



For measuring gas exchange between ecosystems and the atmosphere, LI-COR

8200-104C - TRANSPARENT LONG TERM CAMERA



For long term measurements of net carbon exchange (NCE)



MEASUREMENT OF PHOTOSYNTHETIC FLOW OF CARBON IN DIFFERENT CLIMATE ZONES BY RESEARCHERS OF THE X-BIO INSTITUTE OF TYUMGU

TUNDRA



STEPPE



TAIGA





DATA COLLECTION: FIELD MEASUREMENTS OF CO₂ EMISSION FROM SOIL

ameriflux.lbl.gov/year-of-methane/year-of-methane



NEW SCIENTIFIC LABORATORIES UNDER THE GUIDANCE OF LEADING
SCIENTISTS, CREATED BY MEGAGRANT PROGRAMS ON THE TOPIC
"ECOLOGY AND CLIMATE"



CARBORUS

2021–2023 гг.

TERRARCTIC

2020–2024 гг.

AQUABIOSAFE

2020–2024 гг.



**YAKOV
KUZYAKOV**



**DENIS
TIKHONENKOV**



NEW MASTER PROGRAM

"Regenerative agriculture and forestry", together with the network of partners of the "Improve_Agro" project of the "Erasmus +" program (EU) from the UK, Germany, Greece, Mongolia and Kazakhstan (grant 1 million euros), start of the program: 2021–2022 in Russian and English



NEW MODULE

"Green Economy" (supported by the Vladimir Potanin Charitable Foundation, launch: 2021)



NEW MODULE AND COURSE

With Ohio State University **Regenerative Agriculture** (American Councils for International Education project, launch: 2022)



POST-GRADUATION

Soil science, entomology, mycology, ecology (biological sciences)
Expansion of the number of scientific leaders: will include the heads of mega-grants, new laboratories.

SMIRNOV PAVEL

HEAD OF LABORATORY OF SEDIMENTOLOGY
AND PALEOBIOSPHERE EVOLUTION (L-SEP)

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