



RUSSIAN CARBON FUND
turn-key sustainability services provider

COMMUNICATION ON ENGAGEMENT REPORT

FROM: 2016-08-01 TO: 2020-11-01

Statement of Continued Support by the CEO

To our stakeholders:

By this report I am pleased to confirm that Russian Carbon Fund reaffirms its support to the United Nations Global Compact and its Ten Principles in the areas of Human Rights, Labour, Environment, Development and Anti-Corruption. This is our Communication on Engagement with the United Nations Global Compact and we welcome any feedback on its contents.

In this Communication of Engagement, we describe the actions that our organization has taken to support the UN Global Compact and its Principles as suggested for an organization like ours. We also commit to sharing this information with our stakeholders using our primary channels of communication.

Sincerely yours,

Alexey Shadrin
CEO



About us

Fund's mission - unite society, science, business and state for sustainable development and environmental conservation. Together with leading science experts we develop and implement turnkey solutions that reduce non-financial risks and accelerate growth.

Our work involves interaction with major stakeholders – leading business structures, Federal and local governments, financial institutions, knowledge centers and NGOs. Our team expert team uses scientific knowledge and international standards to help business and state actors reduce environmental and social risks and implement win-win strategies for the benefit of the planet.

Since 2011 our efforts have helped leading business and regions successfully establish and implement sustainability strategies related to risk assessment, transparency, public engagement, efficient resource management, clean tech, internal and external sustainability communications.

Member of



United Nations
Global Compact





ENVIRONMENTAL EDUCATION

October 5, 2018

ECOPOLIS: THE THIRD VERSION OF AN INTERACTIVE EDUCATIONAL TOOL ON SUSTAINABLE DEVELOPMENT OF THE CITIES WITH A FOCUS ON SOCIAL ENTREPRENEURSHIP

Ecopolis aims to educate students on the concept of sustainable development of cities, best practices in environmental protection, and also offers schoolchildren materials for interactive classes and independent work. The project was initially prepared by key experts in various areas of sustainable development, including Nobel Prize winner Igor A. Bashmakov.

A special place in the third version of Ecopolis is given to social entrepreneurship, its role and positive effect on the sustainable development of the cities of the future and the solution of citizens' problems. Ecopolis consists of three main components: an educational kit (textbook with augmented reality models, quiz cards, posters), an educational program for schools, and a contest of social and environmental projects. It is the first ever project in Russia that uses augmented reality for educational purposes: 12 AR models illustrate sustainability-related concepts and technologies (renewable energy, circular economy, plastic recycling etc).

Ecopolis was presented at the annual award for the contribution and promotion of social entrepreneurship "Force for Good", established by the Foundation for Regional Social Programs "Our Future". Ecopolis was also presented during the Education Day of the COP24 organised in partnership with UNDP and UNFCCC in Russian Pavilion, and became the second time when Ecopolis was presented at the international arena after COP23 the year before. There is hope that the project will be scaled up to the international level and will become a truly global initiative!

Ecopolis was first launched in 2016-17 as a pilot project in Moscow, with PJSC Gazprom Neft as a main partner. Later, in summer 2018, the project was launched in partnership with 2018 FIFA World Cup Russia™ Local Organising Committee in 11 cities that hosted the World Cup involving 132 schools and 11 000 children. Currently, project Ecopolis is carried out in partnership with Regional Social Programs Fund "Our Future" in 100 schools in Moscow.



Ecopolis was presented at the annual award for the contribution and promotion of social entrepreneurship "Force for Good", established by the Foundation for Regional Social Programs "Our Future".

February 17, 2019

THE FINALISTS OF ECOPOLIS PRESENT THEIR INNOVATIVE SUSTAINABLE PROJECTS AND WIN A TRIP TO THE UNITED NATIONS EVENT

Ecopolis consists of three main interconnected components: an educational kit itself including textbook with augmented reality models, quiz cards and posters, an educational course for schools and a contest of social and environmental projects. The final evaluation of the course requires students to prepare environmental or social projects focused on solutions for cities and social entrepreneurship. Last year 20 Ecopolis finalists prepared roadmaps and business models that were evaluated by an expert panel, and the best projects got the chance to win grants for its implementation and participate in the United Nations event.

Students prepared various innovative projects such as learning board game «Red List of Threatened Species of Moscow District» developed by Elina Kasayeva; an acorn planting nursery proposed by Aleksandra Malekhina, Ilya Gulyakin and Ivan Philippov; a research on effects of different types of anti-icing reagents on environment presented by Artyom Kaurov; and a study on help of the bush shelters in increase the diversity of bird species in urban parks and protected areas by Fyodor Starynin. One of the projects even became a business idea for a small business “EcoArtInvest”: based on layouts for biology training manuals created from solid waste, proposed by Arina Goryonova.

The first place winners of the contest got a chance to present their projects on the United Nation Development Programme “Climate Box” 2019 that took place in Almaty, Kazakhstan. Aleksandra Gavrilova and Elizaveta Akhumyan presented their projects on the environmental impact of improperly disposed batteries and environmental risks of using a popular detergent respectively. Both winners got prizes as best international projects at the UN “Climate Box” event.





CLEAN TECHNOLOGIES

November 16, 2018

ENERGY BLOCKCHAIN HACK: FIRST RUSSIAN HACKATHON FOR ENERGY MARKETS ORGANISED WITHIN INTERNATIONAL CLIMATHON INITIATIVE

Energy Blockchain Hack, organized by the Fund and Evercity venture ecosystem, became the first event of its kind in Russia, bringing together blockchain developers and global leaders in the energy field such as NP “Market Council”, EDF (Électricité de France) and “Rosseti”. Schneider Electric and Hevel Solar acted as strategic partners of the hackathon. Over 100 developers, students and representatives of energy-related startups took part in the development, competing for the prize pool of 400,000 RUB and the opportunity to collaborate with the leading market players.

The 48 hour-lasting hackathon was a part of the global Climathon initiative that united 130 cities and over 4000 developers internationally. The main goal of the hackathon was the search of new talents and technologies for the phase transition in Russian and international energy industries.

The winners were chosen in four tracks: “Energy management: smart contracts for verification of energy efficiency and mutual settlements with clients”, “Creation of digital infrastructure of green certificates on blockchain”, “Electric transport: creation of platform to stimulate the usage of electric vehicles based on smart contracts” and “Distributed energy: development, smart contracts implementation and payments control on blockchain”.

Developers demonstrated a high level of professionalism, for example, among the numerous achievements: a team from Saint Petersburg presented the first world’s prototype for green certificates on the blockchain. Amongst the other winners were such projects as the architecture of smart contracts and interface optimizing machinery and tracking the level of customer satisfaction, reducing costs for efficiency and eliminating the human factor; an application which allows major socially-oriented businesses interested in obtaining green certificates to attract owners of green electric vehicles for a set of tasks (delivery, etc); a system of incentivization via bonuses for conscientious users and penalties for violators with a real physical IoT sensor to register compliance with conditions, as well as a working application and a smart contract and many others.



June 4, 2019

SMART SUSTAINABLE CITY HACKATHON: HACKATHON ON URBAN DEVELOPMENT UNITING DEVELOPERS, INNOVATORS, CITIES AND CORPORATIONS

From May, 31 to June, 2 over 200 industry experts, business leaders, investors, engineers, ecologists, entrepreneurs, designers, urbanists, developers and authorities gathered together for a 48-hours Smart Sustainable City hackathon, the first blockchain, AI and IoT hackathon for smart sustainable cities in Russia, organised by the Fund and Evercity and supported by Russian Federation Ministry of Construction.

Designed to become an impulse towards digital transformation, the hackathon was aimed at finding innovative sustainable business solutions for smart cities across several themes, including smart housing and communal services, smart energy, smart public transport, smart urban governance, smart security.

In 48 hours, participants from across Russia including students of leading tech universities such as MIPT solved three cases: verification of green energy generation and issuance of green certificates on blockchain; optimization of urban traffic and fuel consumption using ML algorithms; integration, management analysis of data from multiple urban systems.

The winners included a solution for automating the collection of data from heat and electricity meters using IoT and processing data in distributed registers Substrate and IPFS suggested by KORUM team; a solution for issuance and tracking green certificates using Ethereum Public Blockchain as the infrastructure and making falsification of the certificates unprofitable for the producer developed by “Mar(s)ginali” team and many other innovative solutions that could improve the quality of life in cities!

The winning teams received cash prizes, special prizes from track sponsors and the opportunity to participate in a pitch session at VEB.RF and to implement their solutions in cities participating in the Smart City programme, including Volgograd, Derbent and Kaliningrad. Smart Sustainable City Hack was followed by three Demo Days where teams of innovators presented their solutions and explored opportunities for cooperation with strategic partners — EDF, leader in low-carbon electricity generation, and VEB.RF, largest investment company and main development institute in Russia. More than 10 cities also expressed interest in piloting solutions.



June 23, 2020

DIGITAL SDGS ACCELERATOR LAUNCHED WITH SUPPORT OF ITU

On June, 16, within Eurasian Union Day at 5th annual Sustainable Development Goals (SDG) week the Russian Carbon Fund and Evercity presented the Digital SDG Accelerator. The main goal of the Accelerator is to bring together business and innovation communities in Eurasian Union countries to accelerate deployment of innovative digital technologies for anti-crisis recovery and transition to sustainable growth based on UN SDGs. In this process, the accelerator plays a role of catalyst for innovation: winning projects receive valuable experience and necessary support from key market players.

The Accelerator and all of the events have been conducted with support from its infrastructure partner, WEB.Russia, as well as the International Telecommunication Union, the UN Global Compact Network Russia, the CSR Central Asia and more than 20 leaders of the innovation ecosystem in the EAEU countries.

Currently the call for proposals is still open for digital projects on MVP/product stage which help in achieving UN SDGs and recovering from the economic crisis. Participation in the programme will give all finalists a chance to pilot their projects together with the corporate partners of the Accelerator, and to receive financial, juridical, and expert support. As well as this, participants will be able to present their projects at various international events (such as events organised by the UN) and to join an open letter to the EAEU leaders on inclusion of the UN Sustainable Development Goals in national recovery plans (you can find a draft of the letter [here](#)). Besides this, winning solutions will be included into the catalogue of 100 best digital SDG solutions of Eurasian Union.



Denis Unzhakov
Vice President
of Innovations and Digital
Economy Unit of VEB

“We are now restoring the economy after the pandemic, and digitization might become a driver for recovery. We are ready to consider the projects for further support by the whole group of VEB institutions and hope that the Accelerator will result in the real pilot projects which will become a model for many corporations and will be scaled up later.



DIGITAL SDG FINANCE INNOVATIONS

January 30, 2019

BLOCKCHAIN CLIMATE STANDARD AND CARBON CALCULATOR WERE PRESENTED AT COP24

The Fund had conducted a series of presentations and side events at the United Nations Climate Change Conference of Parties 24 (COP24) held on 10-14 December 2018 in Katowice. Our main goal at COP24 was to demonstrate digital sustainability innovations to the international community and create possibilities for future collaboration.

During the “Decentralized Integrity: Climate Finance and Carbon Markets” discussion we presented the Blockchain Climate Standard. Its goal is to integrate climate initiatives in the form of distributed network of mitigation contributors on the basis of common principles, rules, criteria, and platform to account for quantitative commitments-based and project-based mitigation outcomes, to achieve absolute emission reduction targets and ultimate balance of anthropogenic greenhouse gas emissions and anthropogenic increase in removals of GHG by sinks and reservoirs (“carbon neutrality”).

The other innovation presented by the Fund and DAO IPCI (Blockchain project supported by the Russian Carbon Fund) was the carbon calculator, that also uses blockchain as a basis and allows air travelers to mitigate their carbon footprint by buying carbon credits from existing environmental projects. Carbon offsets have been verified, issued and burnt in DAO IPCI blockchain DApp.

The blockchain technology provides possibilities of peer-to-peer transactions, transparency and immutability of data, that can help make the climate finance market more inclusive, and this, in turn, can help to mitigate the dramatic and inevitable consequences of climate change that have been already demonstrated in developing regions.



February 28, 2020

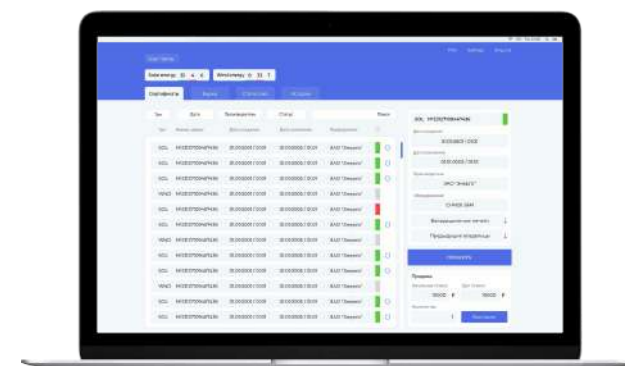
SEVERAL OTHER SUSTAINABILITY PROJECTS USING BLOCKCHAIN TECHNOLOGY WERE LAUNCHED DURING THE PAST TWO YEARS

Blockchain technology showed itself to be a reliable and transparent tool that could be used in sustainability projects. During the past two years DAO IPCI (The project supported by the Russian Carbon Fund) implemented several working products using blockchain technology that demonstrated a positive impact on the environment. One of them was a successful beta-test of the IoT module with Energy Lab, Chile. The Carbon credits emission blockchain registered reductions based on the data on solar energy production received from IoT sensors and grid emission factors.

Other projects include issuance of the renewable energy certificates, collecting data on carbon footprints, issuance digital passports, etc. For example, in 2019 a pilot on the automatic renewable energy certificates (REC) issuance in the public blockchain for the rooftop 11 kW solar power plant in the Skolkovo innovation zone in Moscow was held. The same procedure was applied to issue RECs from a 60 kW solar power plant in Chile.

Later this year DAO IPCI developed a system for issuing the digital passports of farming products in New Zealand, using satellites and IoT to collect data on farms' environmental footprint, recording the data in the blockchain infrastructure and issuing digital passports of farmers' produce. Another interesting development was a carbon market simulation game held at Nazarbayev University, Kazakhstan. Within the project, university campuses competed on their carbon footprint and energy consumption.

Besides that the DAO IPCI has won Energy Blockchain Hackathon in Bern, Switzerland, with a system for calculation and compensation of carbon footprint for the energy sector. Seeing an interest in the projects DAO IPCI has issued some updates for their platform that gives their users an opportunity to use issuance, offsetting and collector services.



December 10, 2019

BLOCKCHAIN FOR OPEN SENSORS NETWORK INITIATIVE ANNOUNCED AT COP25

On December 5 at the official side event by UNFCCC “How digital technologies can support climate action” held at COP25 in Madrid, the Russian Carbon Fund has announced a new educational initiative for climate NGOs - “Public blockchain for open sensors networks”.

The goal of the project is to provide a blockchain framework to all organizations who want to use smart meters to measure air, water and soil pollution and publish this data on blockchain. The framework is built with Parity substrate technology and based on DAO IPCI open source public blockchain protocol that made the first ever blockchain-based carbon credit transaction.

“Digital technologies should serve those who need them most. This is why we are happy to announce our new initiative aimed to educate climate action NGOs on the use of digital tech for immutable and transparent CO2 and pollution measurement”. — said Anita Mujumdar, a 24-year old Russian-Indian climate technology leader from the Russian Carbon Fund.

“Climate change is a disruptive issue, and it requires disruptive solutions. Combination of some of the new emerging technologies such as IoT, distributed ledger and AI allow to build a value chain of data and have the potential to bring change that has not previously been possible in this area of climate change. We really believe that combination of some of these digital technologies can bring disruption to our capability to undertake climate action, as well as disruption in climate policy making”. — said Massamba Thioye, Manager of Regulatory Development Unit of UNFCCC at UNFCCC and Climate Chain Coalition COP25 side event “How Digital Technologies Can Support Climate Action”



June 24, 2020

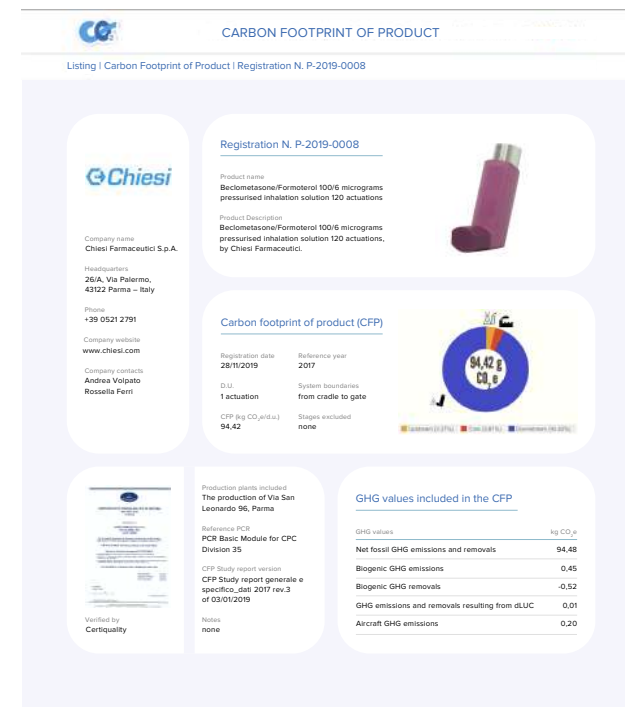
THE FIRST BLOCKCHAIN-BASED SOLUTION TO STORE CARBON FOOTPRINT DATA HAS BEEN LAUNCHED TOGETHER WITH CARBON FOOTPRINT ITALY

Together with Carbon Footprint Italy and assistance from the Fund, DAO IPCI developed an online app that utilizes public blockchain technology to store the information on carbon footprint of products and organizations in CO2 equivalent. That app will prevent data tampering, bringing unprecedented transparency and trust into corporate climate action and its disclosure.

In the application, clients and partners of Carbon Footprint Italy can see digital passports of products and organizations which contain general information, as well as data on carbon footprint and a verification certificate. The data is kept in a decentralized storage IPFS (Interplanetary file system), and the hashes of the data are put into the public Ethereum blockchain. Each passport contains the links to blockchain explorer Etherscan, which proves that the transaction has been made on blockchain, and the data cannot be altered. Being just the first step in cooperation, the project has a great potential for scaling and adding carbon offsetting functions.

Companies and products registered in the Programme Operator Carbon Footprint Italy can use a specific mark developed for each different mode of participation in the programme for the communication of their GHG emission values or reduction. In this way it is possible to communicate in a simple, rapid and effective manner the outcome of Carbon Management actions.

“There is a growing number of companies committed to mitigate the GHG emission related to their products or organizations. The reliable traceability of the effective achievement of these targets requires a solid and transparent monitoring system overtime, - states Daniele Pernigotti, Director of Carbon Footprint Italy - CFI decided to adopt the blockchain technology to make available to the public unmodifiable high-quality data and information on the carbon footprint of products and organizations over time, to allow the real traceability of the established mitigation target achievements. We believe that the introduction of the blockchain will give a very significant improvement in terms of transparency and accountability of the established target for the transition to a low carbon economy.”



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