



MOVE GREEN

Annual report  
Public Association  
**"MoveGreen"**

2022

# TABLE OF CONTENTS

- |           |   |           |   |           |  |
|-----------|---|-----------|---|-----------|--|
| <b>3</b>  | Letter from the Chairwoman  | <b>11</b> | Commitment to climate protection in Kyrgyzstan and Eastern Europe, the Caucasus and Central Asia                                  | <b>17</b> | TechCamp: for clean air in Central Asia            |
| <b>5</b>  | Mission, commitments/goals  |           |   | <b>19</b> | Conference "Gentle City: Bishkek"                  |
| <b>6</b>  | Highlights  | <b>13</b> | "Enhancing Migrants' Awareness on Air Pollution and Moving Towards a "Healthy City Vision" in Bishkek" research                   | <b>21</b> | The "1 Bus Instead of 50 Cars" campaign in Bishkek |
| <b>8</b>  | Building Air Quality Management Capacity in Central Asia  | <b>15</b> | Involvement of civil society in the new residential area Altyn-Kazyk for conservation and protection of Ala-Archa water reservoir | <b>23</b> | Where we work                                      |
| <b>10</b> | Implementation of a Low-cost Air Quality Sensor Network in Central Asia to Improve Air Quality through Capacity Building and Increased Public Awareness |           |   | <b>24</b> | Finances   |
|           |   |           |   | <b>25</b> | Supervisory Board/ Our Team                        |



# LETTER FROM THE CHAIRWOMAN

**Dear citizens of Kyrgyzstan,** 2022 was another year of discovery and breakthrough for us. It had everything: joy and new challenges, opportunities for growth, and sad events. But once again, we demonstrated strength of spirit, unity, the desire to develop, and preserve all the beauty that nature has bestowed upon us in Kyrgyzstan.

This year was not easy for the MoveGreen team either. But it's never easy when you're involved in environmental protection. Because "ecology" is not just about nature, it's also about the economy, politics, and most importantly, people. I now remember November 2017 when we installed three sensors in Bishkek and started receiving the first real-time data on air quality and developed the AQ.kg mobile application. That's when we realized it wouldn't be easy. After all, the residents of Bishkek were convinced that the smog problem was only relevant to industrial cities, and Bishkek, surrounded by mountains, was a green city where people breathed clean air. Meanwhile, the sensors were off the charts, providing discouraging data. The air was dangerous to breathe. But few believed in our data back then, and skeptics still exist today.

The heating season of 2021-2022 was no exception. Not only residents of Bishkek but also those in Osh were breathing unsafe air, and on certain days, air that was hazardous to health.

I want to remind once again that our task was and still is not just to talk about how bad things are, but to make sure that with our help, this "bad" transforms into "good." To achieve this, last year we launched a series of initiatives to improve the environmental situation in cities of Kyrgyzstan cities.

Firstly, we expanded the network of citizen monitoring sensors across the country. Secondly, we conducted several studies, presenting our analysis and recommendations for improving the environmental situation to decision-makers at the local and state levels. Thirdly, we started developing our expertise in energy efficiency, renewable energy sources, transportation, and urban planning.



We also organized training events for deputies, civil servants, journalists, environmental organizations, and youth on air quality and climate change. Our information campaign reached around 2 million people not only in Kyrgyzstan but also in Central Asia. We launched a dialogue platform on air quality in Central Asia, bringing together 120 individuals representing over 30 organizations from Kyrgyzstan, Kazakhstan, Tajikistan, and Uzbekistan to combat smog.

In 2022, we conducted strategic planning for our organization for the next five years, setting clear goals aligned with sustainable development and community engagement in the country and the region. Over these years, we have grown, and we have something to share. Therefore, we have set ourselves the task of advancing the green movement, including developing a membership policy within our organization, increasing our influence for the "green" development of Kyrgyzstan. By the end of 2023, we will launch a competition, giving every citizen of Kyrgyzstan who shares our values the opportunity to join the ranks of MoveGreen.

This year, we continued to collaborate with our partners from the Urban Hub community, working towards environmental safety in cities. We also cooperated with members of the "Green Alliance of the Kyrgyz Republic," addressing issues of climate adaptation, public participation, transparency, and accountability of government bodies in nature conservation policies. Additionally, through our membership in the Climate Action Network EECCA, we learned more about climate policy and, for the first time, participated in the Conference of the Parties (COP27).

The results of our work would not have been possible without our municipal and state partners. I want to express special thanks to the State Agency for Hydrometeorology under the Ministry of Emergency Situations of the Kyrgyz Republic for their support and cooperation. I hope that our cooperation with the Ministry of Natural Resources, Ecology, and Technical Supervision of the Kyrgyz Republic will continue to grow and improve in 2023 and the coming years. Additionally, our work would not have been successful without our regional and international partners, whose contributions we have recognized in this report. Thank you for your trust and partnership. I would like to particularly highlight the selfless work of volunteers and activists. Even if you do not consider yourself as such, you are the ones who, through your compassion and active civic stance, are bringing closer the green future of Kyrgyzstan.

I believe that together, by strengthening and inspiring each other, everything is possible. Even when it seems like the coldest, darkest, and dirtiest evening in Bishkek will never end, a bright and clean day will surely follow. And then, together, we will say, "Bishkek smog!", which in Russian means "Bishkek made it!".



**Maria Kolesnikova**

Chairwoman of "MoveGreen"

## MISSION

To create a society that acts with environmental-conscientiousness and lives in a safe environment within Kyrgyzstan and throughout Central Asia.

To achieve this, we influence the government's decisions on environmental issues based on scientific data, research, analysis and expertise.



## COMMITMENTS/GOALS

1

Strengthen the public's influence over and civic control of environmental issues and develop powerful structures that act on behalf of citizens and experts.

Our organization intends to continue working on strengthening the expert capacity of AQCA platform members, supporting and facilitating the effectiveness of the Environmental Council under the mayor's office of Bishkek city and other cities, promoting civic monitoring of environmental investment programs, environmental education based on sound scientific knowledge, and developing partnerships, including within civil communities.

2

Enhancing the capacity of decision-makers in the areas of air quality and environmental conservation, contributing to advancing the environmental agenda in Kyrgyzstan and Central Asia at the state and municipal levels.

The following activities are planned within this objective: training of leaders and the formation of an environmental lobby; strengthening the expert base for effective participation in decision-making processes related to environmental security; promoting the establishment of energy efficiency funds; supporting the adoption of the Air Quality Index (AQI); supporting policies for the development of public alternative transportation; supporting waste management policies. All these actions are aimed at improving environmental policy and safety in Kyrgyzstan and Central Asia.



# HIGHLIGHTS

1

**THE CREATION OF A PM<sub>2.5</sub> MONITORING SYSTEM USING LOW-COST SENSORS** in Kazakhstan, Kyrgyzstan and Uzbekistan. In Kyrgyzstan 32 AirKaz and 5 Purple Air civil monitoring sensors were installed in different locations of the country. In Kazakhstan, 31 sensors were installed at Kazhydromet observation stations, along with 15 installed throughout different locations recommended by Kazhydromet. In Tashkent, MoveGreen added 2 sensors to the existing network. **As of 2022, our network included 70 sensors.**

2

In February 2022, **MARIA KOLESNIKOVA WAS AWARDED THE HIGHEST UN AWARD IN THE FIELD OF ENVIRONMENTAL PROTECTION – CHAMPION OF THE EARTH.** The Chairwoman of the MoveGreen NGO is the first eco-activist in Central Asia and the EECCA region to win this award. Thus, the international community noted and recognized the work of our organization for improving air quality in Kyrgyzstan.

3

**THE CREATION OF AIR QUALITY CENTRAL ASIA – AQCA**, [www.aqca.platform](http://www.aqca.platform), which provides an analytical base, news and a calendar of events related to air quality protection. The main goal of the platform is to foster dialogue between Central Asian countries about air quality issues in order to strive towards cleaner air. At the moment, the platform brings together **28 organizations, experts and activists** from around Central Asia who work on air quality.

4

The Ministry of Natural Resources, Ecology, and Technical Supervision proposes to introduce a new concept, namely the **"AIR QUALITY INDEX,"** into the Law of the Kyrgyz Republic "On the Protection of Atmospheric Air". To achieve this, amendments have been submitted to the relevant regulatory act, which are currently undergoing public discussion. Adoption of these changes will result in a development of a system to inform the population about air pollution and its impact on human health in real-time. This is particularly important for vulnerable population groups that may be more susceptible to the effects of polluted air.

5

**68 497 421 KGS HAS BEEN RAISED TO IMPROVE AIR QUALITY** in Kyrgyzstan and Central Asia. Donor investments have been directed towards maintaining and enhancing civil society awareness, working with government institutions and agencies, creating opportunities for dialogue between citizens, the government, and experts, and overall contributing to the fight for improved environmental conditions and clean skies for ourselves and generations to come.

6

**THE ANALYTICAL AND INFORMATION BASE**, which is freely available on the website of the organization, has been replenished with 9 seasonal reports on air quality in Bishkek and other regions of Kyrgyzstan, 1 study and 9 analytical notes and articles based on proven, scientific data, prepared by our experts in relevant fields. We are proud that this database has become useful both for citizens and for the work of state bodies of countries and experts in Central Asia.

# OUR PROJECTS



## BUILDING AIR QUALITY MANAGEMENT CAPACITY IN CENTRAL ASIA

The project to combat air pollution in Kazakhstan and Kyrgyzstan is a response to a serious problem that has a negative impact on human health, the region's ecological condition, and has long-term consequences for the population.

Air pollution also harms the environment by reducing oxygen supply to our oceans, hindering plant growth, and contributing to climate change. However, despite the damage caused, air pollution is not considered a priority in many countries.

Existing mechanisms for monitoring and regulating air quality in Central Asian countries need improvement, and public awareness of the issue is insufficient. The project utilizes low-cost sensors to expand the capability of air quality monitoring in Kyrgyzstan, Kazakhstan, and other countries in the region.

The main sensors selected for the project are the AirKaz sensors, which have obtained certification in Kazakhstan and Kyrgyzstan and have undergone the necessary technical verification. The data from the AirKaz sensors has been successfully integrated into the data collection system of Kazhydromet (Kazakhstan's national meteorological service).

By 2022, the project has installed 30 sensors at Kazhydromet observation posts in over 15 populated areas in Kazakhstan.

In Kyrgyzstan, thanks to the project, 28 AirKaz citizen monitoring sensors and 5 Purple Air sensors have been installed in all regional centers and major populated areas of the country.

*This has significantly expanded the monitoring network and provided more accurate air quality data.*

**30**

SENSORS IN  
KAZAKHSTAN

**33**

SENSORS IN  
KYRGYZSTAN





The project actively engages with relevant government agencies in both countries. Project experts and partners develop recommendations for improving air quality monitoring in Kazakhstan and Kyrgyzstan. The recommendations for Kazakhstan were presented at a roundtable discussion with key relevant organizations in 2022 and were handed over to the Minister of Ecology, Geology, and Natural Resources of Kazakhstan. The discussion and presentation of recommendations for Kyrgyzstan are planned for 2023.

The establishment of the Central Asia Air Quality Platform (AQCA) in 2022 has brought together regional stakeholders for collaborative learning and optimization of efforts to reduce air pollution. Currently, the platform comprises more than 28 organizations, experts, and activists from Central Asian countries working on air quality issues.

Raising public awareness about air quality is an important component of the project. Series of seminars and lectures have been conducted for representatives of government structures, experts, civil activists, youth, and schoolchildren in Kyrgyzstan and Kazakhstan. An intensive information campaign through social media and traditional media channels has helped increase public awareness and foster understanding of the importance of air pollution issues.

The MoveGreen project on air quality monitoring in Central Asia holds significant importance in bringing together regional stakeholders for collaborative learning and supporting the optimization of regional efforts to reduce air pollution.

Through innovative technologies and data work, such as expanding the network of low-cost PM2.5 sensors, developing a mobile application and the AQCA.asia website to provide real-time air quality data in the region, and generating analytical reports using the collected data, the project has been successful in improving air quality monitoring and covering new territories where air quality information was previously unavailable in the countries of the region.

The project actively interacts with government agencies, provides recommendations, and trains specialists. All project activities are supported by an extensive information campaign aimed at raising public awareness about air quality issues in Kyrgyzstan, Kazakhstan, and Central Asian countries.

However, continued efforts and investments in this area are necessary to achieve long-term and sustainable reduction in air pollution in the countries of the region.

#### Development of the Central Asian Air Quality Platform (AQCA)

The activities of the AQCA platform have been expanded through partnerships with UNEP and DRA. Both organizations provided co-financing for organizing conferences and implementing an information campaign for the platform, including the creation of the website [www.aqcplatform.asia](http://www.aqcplatform.asia).

#### The UNDP/UNEP study "Air Quality in Bishkek"

MoveGreen was involved as a local expert organization. The report provides a scientific rationale for the current state of ambient air quality in Bishkek, including the process of identifying major emission sources that impact its quality. Additionally, a new air quality management strategy is presented.

#### Development of a roadmap for transitioning to the Air Quality Index (AQI) in Kyrgyzstan and Kazakhstan (UNEP)

The project's experts were involved in the development of a roadmap that outlines detailed steps for the implementation of the Air Quality Index (AQI) in Kazakhstan and Kyrgyzstan. The documents were discussed with relevant government agencies and presented to decision-makers in both countries.

#### Installation of monitoring sensors in the Issyk-Kul region

MoveGreen provided expert support to the PA "Leadership" in installing civic air quality monitoring sensors in the southern districts of the Issyk-Kul region.

#### Mural for School No. 84 in Bishkek (UNEP)

MoveGreen has created 2 murals depicting air pollution and ways to address it in Bishkek. The mural is located on the wall of School No. 84 in Ak-Orgo, one of the most polluted areas of Bishkek.



## IMPLEMENTATION OF A LOW-COST AIR QUALITY SENSOR NETWORK IN CENTRAL ASIA TO IMPROVE AIR QUALITY THROUGH CAPACITY BUILDING AND INCREASED PUBLIC AWARENESS

At the moment, reliable air quality data is lacking in key locations where pollution is most significant due to industrial activities, vehicular emissions, and urban residential areas. This creates barriers to implementing effective pollution control strategies and developing relevant policy measures.

Our project aims to implement a calibrated PM<sub>2.5</sub> sensor network in key locations of each country, providing reliable and accurate PM<sub>2.5</sub> concentration data. These data will be easily accessible to both the general public and policymakers, and the developed software tools will be used to assess air quality, identify pollution sources, and develop potential strategies for mitigating the negative impacts. We also strive to establish a sustainable framework that enables local organizations to independently maintain PM<sub>2.5</sub> measurements and analysis in the future.

Our project represents an innovative approach to air pollution monitoring, combining low-cost sensors and data analytics. We are confident that this network will serve as a model for future air quality monitoring projects worldwide.

### **Impact:**

As a result of our project, we will be able to install a calibrated network of PM<sub>2.5</sub> sensors in key locations of each country. These sensors will provide reliable, accurate data on PM<sub>2.5</sub> concentration which will be used to effectively evaluate air quality, identify pollution sources and develop strategies for minimizing adverse effects. Thanks to this data, we will increase public awareness about pollution and help improve people's health.

### **Innovations:**

One of our project's key innovations is the use of calibrated, low-cost PM<sub>2.5</sub> sensors together with software tools and machine learning methods.

### **Partnership with the Tashkent Institute of Irrigation and Agricultural Mechanization Engineers**

Leading specialist in air quality research in Uzbekistan, Professor Mansur Amonov, and Michael Bergin, a professor of civil and environmental engineering at Duke University, began their collaboration in 2013 on issues related to air pollution, including the distribution of PM<sub>2.5</sub> particulate matter by sources. This joint work will provide a better understanding of the situation in the region and contribute to the advancement of measures to combat air pollution on a regional scale.



This provides us with a stable and reliable network of sensors which our partners may support and expand in the future. We also developed a Central Asian platform on air quality ([www.aqca.platform](http://www.aqca.platform)) which serves as an analytical base, news source, and event calendar to ensure that information is available to the public and government institutions.

Our project holds immense significance for society and the ecosystem. Through accurate

monitoring of PM<sub>2.5</sub> concentration, we will be able to effectively combat air pollution and make informed decisions for its improvement. It is important to understand that air quality directly impacts human health and ecological balance, which is why our project has long-term value and requires support and attention from all stakeholders. We call for action and express deep gratitude to donors, partners, and supporters who are backing our efforts to enhance air quality and create a sustainable future.

### **Collaborative research on air quality and its impact on health at Nazarbayev University (NU)**

Nazarbayev University plans to annually invest significant funds into the university's research infrastructure (up to \$500 million by 2030). Currently, Dr. Shah from Nazarbayev University and Dr. Amui Torkmahalleh from the University of Illinois at Chicago are conducting research and supervising four doctoral dissertations on topics related to air pollution and its impact on health.



## COMMITMENT TO CLIMATE PROTECTION IN KYRGYZSTAN AND EASTERN EUROPE, THE CAUCASUS AND CENTRAL ASIA

In the modern world, climate change has become one of the most pressing and concerning issues. In this context, Kyrgyzstan, as a country with high potential for renewable energy sources (RES), faces a significant challenge. According to the conducted analysis, the country's RES potential is estimated at 840.2 million tons of conditional fuel per year. However, despite such prospects, Kyrgyzstan continues to expand the use and production of fossil fuels, which contradicts the international conventions that our country has joined.

There are several obstacles obstructing the effective implementation of RES in Kyrgyzstan. The huge amount of paperwork, a lack of clearly defined responsibilities, and insufficient control by the government hinders achieving SDGs (Sustainable Development Goals). Moreover, the low awareness among decision-makers, businesses, the general public, and the media about the benefits of using renewable energy sources and their contribution to mitigating the consequences of climate change exacerbates the situation.

Our work in the analysis and assessment of renewable energy sources allows us to provide valuable information on the contribution of renewables to mitigating the impacts of climate change. Experts involved in the project component, "Climate Change Policy Review and Discussions in Kyrgyzstan" prepared the following:

a) **Analytical note "Benefits of Renewable Energy Use in Kyrgyzstan"**, which provides a concise and summarized presentation of the conducted research, including well-founded evidence and justification for the advantages of transitioning to renewable energy.

b) **Analytical note "Utilization of Coal Ash with Minimal Consequences for Environment and Human Health"** highlighting that the environment is polluted not only during coal mining, transportation, storage, and smoke emissions but also by the residues from its combustion. The document includes practical recommendations for institutional changes to increase the utilization of ash and slag in various industrial sectors and outlines the benefits of ash utilization.

The document was presented at a roundtable discussion attended by decision-makers, the expert community, activists, and the media.

Based on the analysis and confirmed facts, MoveGreen has intensified its information campaign to raise awareness of the role of renewable energy in mitigating the consequences of climate change.

We have implemented several innovative approaches and initiatives aimed at educating and developing the community in the field of sustainable development and climate change mitigation.

Under the component "Building Civil Society Capacity in Kyrgyzstan," a series of events have been conducted on topics such as citizen participation in the budget process, Shaarkana (city dialogues) on waste management and recycling, as well as workshops/media tours on organic waste processing through biogas installations. Educational initiatives such as the "School of Environmental Advocacy" and the "School of Environmental Leaders" were also organized.







Thirty representatives from environmental organizations participated in an online eco-advocacy school, where they learned about modern advocacy tools, from developing information campaigns to working with decision-makers. Real-life case studies of environmental advocacy were discussed, and participants developed their own plans. The top five plans received financial and mentorship support through a small grants competition of up to 2000 euros.

In order to enhance the capacity of the new generation of eco-activists for effective engagement with the public, media, and decision-makers in Kyrgyzstan, the second seven-day intensive School of Environmental Leaders was conducted. Participants gained in-depth knowledge of their socio-environmental rights, understanding of existing environmental issues and climate change, as well as methods of civic participation and project development. They successfully implemented 15 initiatives, acquiring personal experience in civic engagement.

#### Digest CAN EECCA

More than 1700 people have subscribed to the weekly digest CAN EECCA and receive credible and accessible information about climate change, which strengthens and expands national discussions about climate change within Kyrgyzstan and throughout the EECCA region.



We have also actively participated in the preparation of the national position of civil society in Kyrgyzstan for **the 27th Conference of the Parties under the United Nations Framework Convention on Climate Change**. Our project team has contributed to discussions and the development of strategies for achieving sustainable development and overcoming the challenges of climate change.

We also collaborate with CAN EECCA, the largest network of climate public organizations in the Eastern Europe, Caucasus, and Central Asia region. The project component "Building the Capacity of CAN EECCA Members and Increasing Climate Awareness in the EECCA Region" is based on regional cooperation, which strengthens the potential of environmental CSOs, activists, and other stakeholders. Through the project, CAN EECCA members have been able to enhance their capacity in combating climate change, and as a result of online webinars, activists from Kyrgyzstan and Kazakhstan have gained a new tool for promoting adaptation measures and transitioning away from fossil fuels.

In conclusion, we are taking a wide range of measures to eliminate the use of fossil fuels in Kyrgyzstan and mitigate the effects of climate change. We are working to raise awareness, offer recommendations, educate the public and actively take part in international discussions. Our goal is to create a sustainable and environmentally-friendly energy system for Kyrgyzstan's future generations.



## “ENHANCING MIGRANTS’ AWARENESS ON AIR POLLUTION AND MOVING TOWARDS A “HEALTHY CITY VISION” IN BISHKEK”

There is a serious air pollution problem in the residential areas on the outskirts of Bishkek, which has a negative impact on the health of the residents. These areas, known as the “migration ring,” have emerged as a result of the influx of internal migrants, and their population continues to grow.

However, these settlements remain illegal and are not connected to the communal infrastructure, including heating and gas supply systems. This leads to the use of coal for heating, which is one of the main causes of air pollution.

With the aim of studying the extent of air pollution in 25 selected residential areas in Bishkek and its impact on the health and well-being of the residents, a research study was conducted. The study examines the problems faced by the residents of these residential areas and their level of awareness about the health risks of air pollution. It also provides recommendations for improving air quality in these areas.

The air pollution in residential areas on the outskirts of Bishkek represents a critical situation for the healthcare system.

A study conducted in selected residential areas revealed that the primary factor contributing to pollution is the use of coal for heating during the autumn-winter period.

As a result, the concentration of fine particulate matter with a diameter of 2.5 microns (referred to as PM<sub>2.5</sub>) in the air can exceed the permissible levels by more than three times.

Other factors influencing air quality throughout the year include the lack of garbage containers and green spaces, irregular waste collection by municipal services, dust from unpaved roads, poor air circulation, and high population density in residential areas.

Almost all respondents, including residents and experts, acknowledge health issues associated with poor environmental conditions and low air quality in the surveyed residential areas.

These health problems include increased occurrence of symptoms such as frequent headaches and dizziness, dryness and irritation in the nose, eyes, and throat, allergies, shortness of breath, chronic cough, chest pain, and heart problems after moving to these residential areas.

Currently, the Ministry of Healthcare lacks comprehensive data on the prevalence of diseases among residents living in these studied residential areas.

Nearly half of the respondents living in these outskirts of Bishkek do not have registration, depriving them of access to free government services, including healthcare and education.



Currently, there are indications of political interest in legalizing these residential areas. On August 13, 2021, the President signed a Law "On Introducing Amendments to the Law of the Kyrgyz Republic" and "On the Transfer (Transformation) of Land." However, the full impact of these legal changes on the situation in the residential areas and their residents is yet to be determined.

Respondents note that if the harmful effects of air quality are comprehensively explained to residents, **they will more willingly switch to higher-quality coal.** There is reluctance to switch to gas and electric heating, despite the fact that respondents acknowledged better air quality in residential areas connected to gas heating. Residents, including internal migrants living in the studied areas, are ready to take responsibility and adopt

other environmentally friendly practices, such as sorting waste, planting trees, and improving the energy efficiency of their homes, given that such practices will not bear a financial toll, since most of them have low incomes.

To effectively address air pollution, the Bishkek City Mayor's Office and the Kyrgyz Government **should develop a comprehensive action plan that takes into account the interests of internal migrant communities** living in residential areas on the outskirts of the city, as well as small- and medium-sized sewing and bathing enterprises located in these areas.

Based on the results of this study, we have prepared a report containing specific recommendations to address this issue.



### Legalizing residential areas

Currently, there are some signs of political engagement with the legalization of these residential areas; on August 13, 2021, the President signed the Law "On Introducing Amendments to the Law of the Kyrgyz Republic" and "On the Transfer (Transformation) of Land".





## INVOLVEMENT OF CIVIL SOCIETY IN THE NEW RESIDENTIAL AREA ALTYN-KAZYK FOR CONSERVATION AND PROTECTION OF ALA-ARCHA WATER RESERVOIR

The project was launched with the aim of improving conditions in the environmentally hazardous zone - the residential area of "Altyn Kazyk" and preserving the Ala-Archa reservoir in Kyrgyzstan. The residential area of "Altyn Kazik" has a population of about 3,000 residents and is located in the sanitary zone on the northwestern outskirts of Bishkek, near the city landfill where construction is officially prohibited.

The landfill poses a health risk to residents, contaminating the soil and groundwater. The smoke from the landfill, which is over 22 meters high, envelops the residential area throughout the year. During the warm seasons, the landfill burns and decomposes more intensively. The living conditions of the local residents are aggravated by the lack of access to basic infrastructure. For over 35 years, the landfill has not had an environmental permit, and no environmental impact assessments or data measurements have ever been conducted on its territory.

Contaminated water can flow into the Ala-Archa River during heavy rains. The river, which supplies the reservoirs including the Ala-Archa reservoir, runs 500 meters away from the landfill. Harmful substances accumulated at the landfill can reach the fields of farmers, whose produce eventually ends up on store shelves. Thus, there is a complete disregard for the importance of preserving and protecting the water bodies by both the government authorities and the population.

Main goal of the project: To improve collaboration among experts, citizens, and government agencies in protecting the Ala-Archa reservoir and increase civic engagement of the residents in the residential area of "Altyn-Kazik" on environmental issues.

The main goal of the project is to improve collaboration among experts, citizens, and government agencies in protecting the Ala-Archa reservoir and increase civic engagement of the residents in the residential area of Altyn-Kazyk on environmental issues. Primarily, this project aims to improve conditions in Altyn-Kazyk by expanding the rights and opportunities of community members, enhancing its resilience through civic environmentalism, and their role in addressing environmental problems.

Within the framework of this project, a series of activities have been conducted to increase the participation of local residents in environmental matters. One of such activities is the development of public spaces through participatory design and planning. In collaboration with the local residents of the residential area, the only bridge that leads to the neighboring residential area has been improved and illuminated with solar-powered projectors.





Additionally, workshops on air purification devices have been conducted for the local community, along with a range of training sessions on ecology, sanitation, and social benefits.

Discussions with municipal and government agencies have been held on waste management and waste sorting, as well as roundtable discussions on the sanitary and water protection zone of the Ala-Archa reservoir. Regular meetings with local management authorities of the residential area and the administration of the Lower Ala-Archa reservoir are also conducted.

A joint clean-up event involving representatives from the Ministry of Nature and Technical Supervision of the Kyrgyz Republic and local school students was organized.

At this stage of the project, the installation of informational signs along the water protection zone of the Ala-Archa reservoir is being implemented for its protection and conservation.

The work done creates momentum within civil society to demand monitoring and implementation of effective state policies for the preservation of the water body and prevention of its pollution.

The project will serve as a pilot and an example for scaling up similar activities for the conservation of water bodies in Kyrgyzstan. It will emphasize the important role of local communities in addressing environmental changes and contribute to raising awareness of this role among other vulnerable communities. Local authorities will gain valuable knowledge and experience in water body conservation through collaboration with the local community.

It is important to note that the project's activities will have a direct impact on the preservation of the Ala-Archa Reservoir, which serves as a source for irrigation of agricultural fields in the Chui region. Currently, the project is in the implementation stage, and its completion is expected in July 2023.



### Crowdfunding for a woman working at a landfill

About 20 years ago, Tajikan Eje moved to Altyn-Kazyk after experiencing severe family tragedies in her homeland.

She and her sons work at the landfill site. Like other landfill workers and residents of nearby residential areas, she and her children have to breathe the smoke from the landfill that burns year-round and the methane emitted from garbage.

Through crowdfunding, MoveGreen raised 193,000 som to assist Tajikan Eje in building her home in the city.



## TECHCAMP: FOR CLEAN AIR IN CENTRAL ASIA

B In December 2020 and January 2021, Bishkek ranked first in the global air pollution index with a record-high level of PM2.5. Air pollution exists not only because emission regulations are not strictly enforced but also because people have only started to realize its adverse impact on their health and the country's economy. Thus, people unknowingly exacerbate the problem by burning waste, leaves, low-quality coal, and driving vehicles with high levels of exhaust gases. The consequences of air pollution on health include respiratory and infectious diseases such as COVID-19, heart diseases, stroke, and lung cancer, and can worsen other illnesses. Some studies suggest that women and children are more vulnerable to the negative effects of pollution than men due to a combination of biological, social, cultural, and economic factors.

The link between the growing problem of air pollution and effective governance is also in its early stages. While the US Embassy in Bishkek and the US Environmental Protection Agency have expanded technical cooperation on air quality monitoring with responsible government agencies such as hydrometeorological agencies in Kyrgyzstan, Kazakhstan, and Uzbekistan, these institutions have been less accessible and transparent to civil society partners.

To address this obstacle, the TechCamp team aims to strengthen trust and collaboration between the government and civil society, focusing on the relatively less contentious but still important issue of air quality data.

### Development and implementation of an Air Quality Index (AQI)

One of the significant outcomes of TechCamp was also a joint statement by the Ministry of Natural Resources and Technical Supervision of the Kyrgyz Republic, together with the Ministry of Education and KyrgyzHydromet, to develop and implement an Air Quality Index (AQI) to inform the population about the real-time air quality status. This initiative aims to enable people to protect their health during hours and days with unhealthy levels of air pollution, particularly during the fall and winter periods.



During the project, we conducted three online sessions on monitoring, legislation, and international practices for improving air quality, involving local, regional, and international experts and researchers. In addition, two TechCamp events for clean air in Central Asia were held in Bishkek to bring together the efforts of civil society and the government in addressing the air pollution crisis.

Air quality monitoring networks in the region remain underdeveloped, and there is widespread misunderstanding of what the data means.

Therefore, the TechCamp's information literacy training included the basics of interpreting pollutant levels, the implementation of the Air Quality Index (AQI), different types of data obtained from various monitoring devices, and the negative impact of dirty air on health.

A project and ideas competition was also organized among the participants. Four projects were selected based on their alignment with TechCamp's main goals: regional cooperation and communication on air quality, youth engagement, and innovations implemented in Kyrgyzstan and Kazakhstan.

The real solution to air pollution requires additional resources, expertise, and motivation, as well as data-driven innovative solutions. Information literacy activities that bring together regional stakeholders, researchers, activists, and government officials have improved governance of air quality.

The project has helped civil society gain a tool to strengthen the agenda for improving air quality in Central Asia, specifically increasing the substantiation of activists' calls on this issue. Informational and educational sessions, as well as the projects of TechCamp participants, have reached over 800 people, including decision-makers, officials, journalists, activists, researchers, and youth in Central Asian countries.



# **NEW ENDEAVORS:**

URBAN PLANNING AND  
ENVIRONMENTAL SAFETY

## CONFERENCE "GENTLE CITY: BISHKEK"

Despite the increasing economic inequality and the attention it draws from journalists and politicians worldwide, little is said about the systematic disregard for the experiences of women and other marginalized groups in urban spaces, as well as the crucial role of women in productive and reproductive labor that sustains the life of our cities.

Feminist researchers argue that cities are patriarchies made of stone, glass, brick, and concrete. In the "Western" world, there have been some, albeit minor, attempts to challenge the sexist nature of cities. However, in post-socialist cities, these issues are rarely on the

agenda of urban professionals. The practice of urban planning and the public discussions surrounding urban environments show that professionals tend to focus on creating "comfortable" spaces that appeal to the middle-class (men), while neglecting the rest of the urban public and ignoring the ideas of urban justice.

To make feminist urbanism an important part of the urban agenda, we have developed an agenda for a conference that represents the first attempt of its kind to examine the relationship between gender and urban space in post-socialist countries.







The "Gentle City: Bishkek" conference became the first platform in Central Asia for discussing the relationship between gender and urban space. It brought together researchers, activists, artists, journalists, and architects to address issues related to the urban environment from a feminist perspective, which had not been widely explored in their respective practices before.

The conference focused on gender and other inequalities in contrast to other urban-related events/discussions. It specifically highlighted the experiences of women and other marginalized groups in urban spaces, as well as the crucial role of women in productive and reproductive labor that sustains the life of our cities. Therefore, we believe that the stated goal of the project was achieved: we connected experts from post-socialist cities and initiated discussions on urban inclusion and future collaborations.

We had three expectations for the conference: to create a new agenda in urban activism, planning, and governance; to facilitate knowledge exchange, practices, and ideas; and to build a community of professionals working on feminist urbanism. Our expectations were met. The conference did not focus on specific aspects of a feminist city but rather raised multiple topics and attracted diverse participants, showcasing the variety of approaches in urban planning and governance that we adhere to. This allowed us to engage different communities and bring

together individuals with diverse professional and political perspectives. As a result of the conference, we witnessed the emergence of cooperation among participants, and the activist community in Bishkek expressed a demand for further work on the topic of the feminist city. This indicates that the agenda of the feminist city has significant potential to develop in Central Asian cities and beyond. Instead of pursuing a "comfortable" city, there will be a shift towards an inclusive and "just" city, one that is attentive to the needs of the most vulnerable groups.

The main organizers and partners of the conference were the civic initiative "Peshcom", the creative studio "SYNERGY," feminist activist group "FemSoc", and the Bishkek School of Contemporary Art (BiSCA). The conference initiated a discourse on the connection between gender and urban space, which can be further developed in Kyrgyzstan. Additionally, new connections were formed among participants from different countries such as Belarus, Russia, Moldova, Austria, Poland, Kazakhstan, and Kyrgyzstan, which have the potential to evolve into collaborative initiatives and projects.



## THE "1 BUS INSTEAD OF 50 CARS" CAMPAIGN IN BISHKEK

Since 2017, the Bishkek City Hall has been expanding the roads of the capital in an effort to reduce traffic congestion during peak hours. However, instead of alleviating the problem, the traffic jams have been increasing, and the number of private vehicles on the roads has been growing (with approximately 500,000 cars circulating in the city daily, while the road capacity is 10 times less).

Additionally, due to the road expansion, trees are being cut down. These trees not only help humidify the air but also provide cooling shade during hot summer days. Furthermore, cars running on low-quality fuel contribute to air pollution during the summer with harmful exhaust emissions. Despite the fact that a passenger car can accommodate four people, measurements taken in Bishkek have shown that in 70% of cases, cars only carry one person – the driver.

The residents of the Urban Hub community in Bishkek organized the campaign "1 Bus Instead of 50 Cars" to visually demonstrate how urban space is utilized depending on the mode of transportation used by city residents. Thanks to the campaign, we measured how many square meters of road space were occupied by 50 people:

**30** – on 1 bus  
**50** – on scooters  
**70** – on bicycles  
**600** – in cars

This means that cars occupy the most space on the roads but transport the fewest number of people. Constructing new roads and highways for automobiles does not solve the traffic congestion issue. Research and experiences from other countries have proven that the more conditions are created for cars, the more cars there will be, leading to the reemergence of traffic jams over time.

One of the most effective ways to relieve road congestion is to incentivize people to reduce their use of private vehicles for city transportation and instead switch to public transport and other forms of individual mobility such as bicycles, scooters, and others. In the city of Bishkek, with a population of one million, there are only 90 municipal buses and around 140 small private buses, 130 trolleybuses, more than 1500 minibusses, and nearly a million cars.

Based on the results of the campaign, we have prepared visual materials for comparisons (social media cards, videos) for the citizens. We have also **sent them to the Bishkek City Hall along with the following recommendations:**

- 1 Develop comprehensive and safe urban cycling infrastructure.**
- 2 Implement projects in the city with dedicated lanes for public transport.**
- 3 Encourage residents to switch from personal cars to bicycles, scooters, or public transport whenever possible.**

This campaign would not have been possible without the support of the Kyrgyz-German small project

"Fighting Air Pollution in the Kyrgyz Republic" implemented by GIZ, as well as the participation of active citizens, the Bishkek City Hall, "Sunret" company, which provided scooters, and "Spark" electric cars.

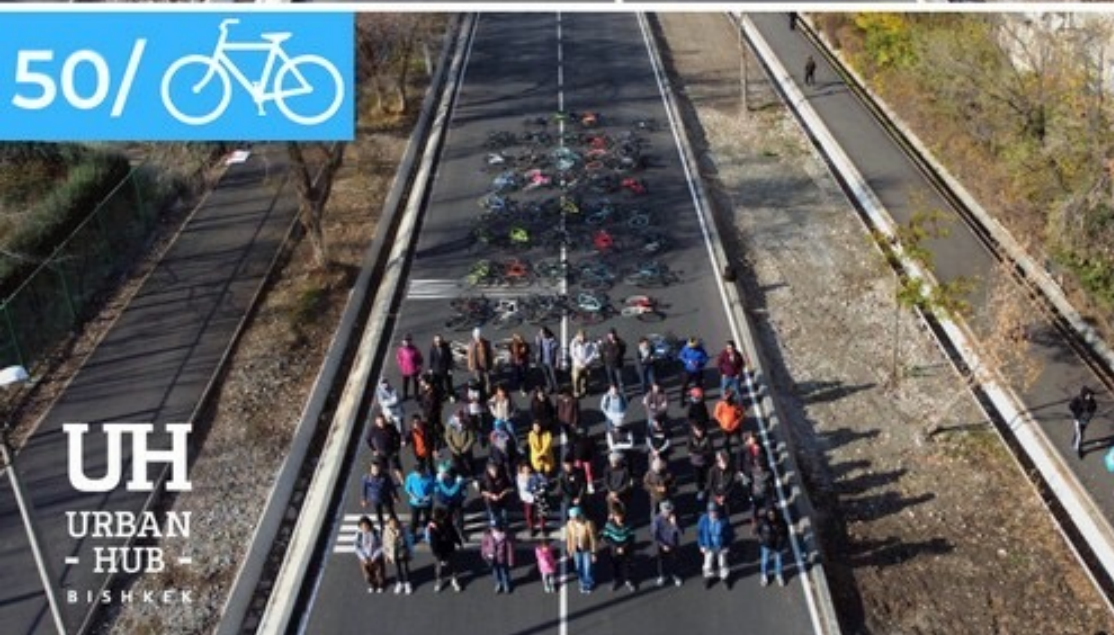
The campaign has yielded practical results, visually demonstrating the efficient use of urban space by various modes of transportation.

Overall, addressing the issues of traffic congestion and air pollution in Bishkek requires comprehensive measures, including the development of public transport, the creation of infrastructure for bicycles and other forms of individual mobility, and a shift in residents' behavior towards more environmentally friendly modes of transportation.

### Urban Hub Community

Our community, Urban Hub, consists of urbanists and urban ecologists in Bishkek. We are active members of the Eco Council under the Bishkek City Hall, which serves as a platform for engaging civil society in urban governance with a focus on environmental safety. We work on issues related to greening, air quality, waste management, urban infrastructure, and mobility. Members include initiatives such as "Archa," "Tazar", "Peshcom", the Bishkek School of Contemporary Art (BiSCA), the PF "Urban Initiatives", and us - PA "MoveGreen".







# FINANCES

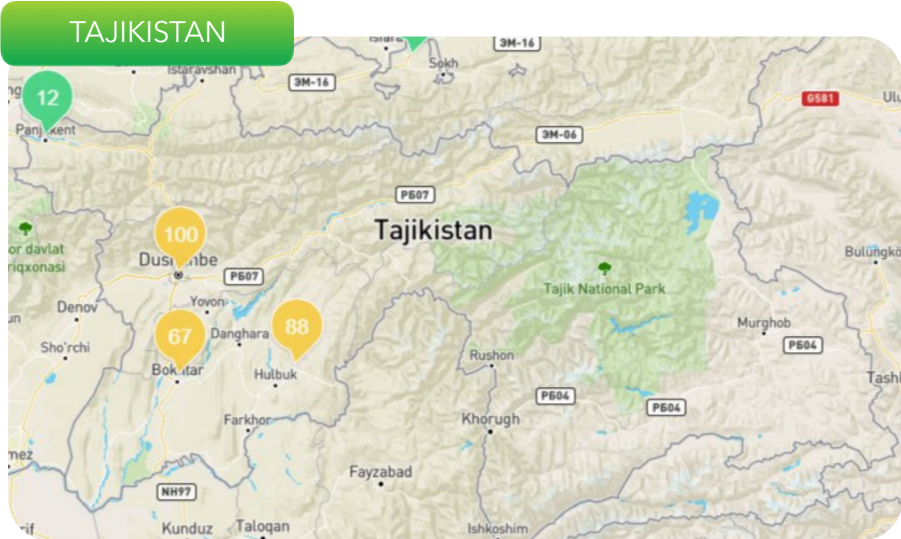
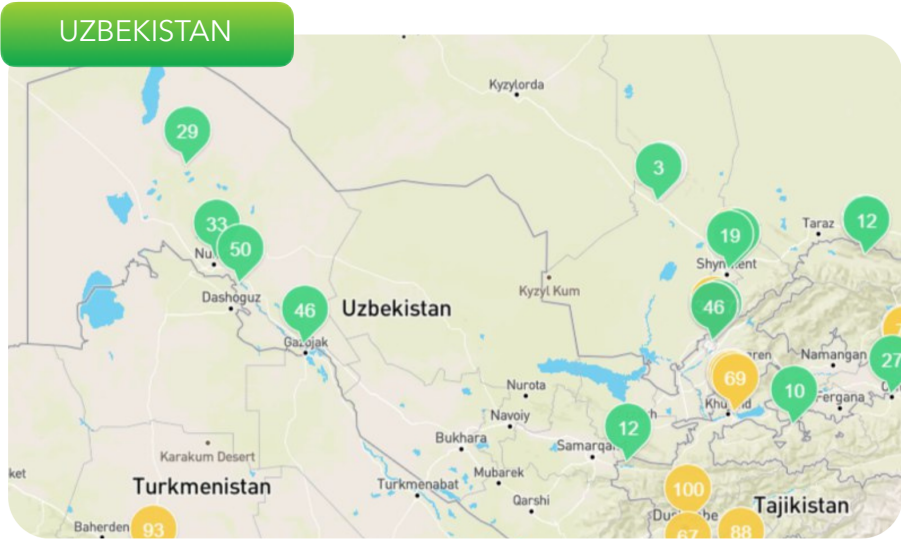
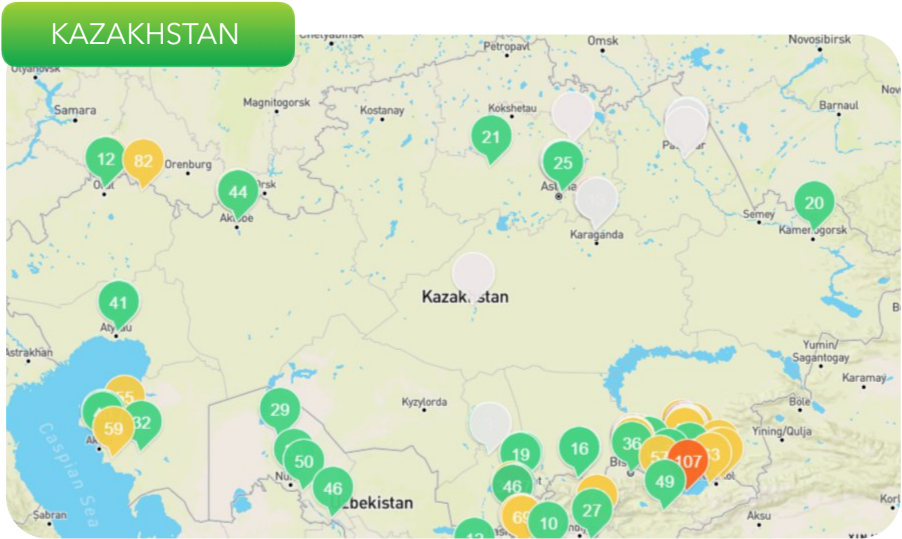
Existing and completed projects for 2022	Donors	Total budget (exchange rate of NBKR as of the end of 2022: 1 US dollar = 84.8 som, 1 euro = 91.43 som)
Building Air Quality Management Capacity in Central Asia (October 2020 - September 2023)	U.S. Department of State, Office of Environmental Quality Bureau of Oceans and International Environmental and Scientific Affairs	<b>25 048 732 som</b>
Implementation of a Low-cost Air Quality Sensor Network in Central Asia to Improve Air Quality through Capacity Building and Increased Public Awareness (October 2022 - September 2025)	Duke University	<b>6 360 000 som</b>
Commitment to climate protection in Kyrgyzstan and Eastern Europe, the Caucasus and Central Asia	International development and relief agency Bread for the World, Germany	<b>25 302 064 som</b>
"Enhancing Migrants' Awareness on Air Pollution and Moving Towards a "Healthy City Vision" in Bishkek" research	International Migration Organization in Kyrgyzstan	<b>1 825 000 som</b>
Вовлечение гражданского общества в новостройке Алтын-Казык для сохранения и защиты водохранилища Ала-Арча (October 2022 - July 2023)	Democracy Commission, US Embassy in The Kyrgyz Republic	<b>3 163 040 som</b>
TechCamp for Clean Air in Central Asia	US Embassy in Kyrgyzstan	<b>6 798 585,6 som</b>
Conference "Gentle City: Bishkek"	Prague Civil Society Centre	<b>2 151 579,22 som</b>
The "1 Bus Instead of 50 Cars" campaign in Bishkek (November 2022)	GIZ, Kyrgyz-German small project "Fight Against Air Pollution in the Kyrgyz Republic"	<b>Социальная акция Urban Hub</b>

Income			Expenses		
	Grants	25,715,811.02		Honorariums	14,953,371.16
	Donations	960,445.00		Events	9,930,356.97
	Income	2,737,822.53		Subgranting	4,634,325.86
	<b>Total</b>	<b>29,414,078.55</b>		Office expenses	4,341,457.35
				Unified tax	109,513.57
				<b>Total</b>	<b>33,969,024.91</b>
				Incl. taxes	
				Income Tax	207,117.67
				Insurance Fee + State Accumulative	627,230.43



# WHERE WE WORK

Maps demonstrate the locations of our civic monitoring sensors. Data taken from AQCA.asia application.



# SUPERVISORY BOARD



**BOZHIL KONDEV**

**Chair of the Board.**

Master of Science in Environmental Science and Policy, independent consultant on climate change, energy, and sustainability



**RAHAT YUSUBALIEVA**

**Member of the Board.**

Master of Science in Management of Development Projects



**ILIAS VADUD**

**Member of the Board.**

Senior Contracts Assistant, OSCE Secretariat, Vienna, Austria



# MANAGEMENT



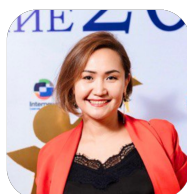
## MARIA KOLESNIKOVA

**Chairwoman**, Air Quality Expert, Research, Advocacy, And Awareness Activist. Recipient of the Highest UN Award in Environmental Conservation "Earth Champion"



## MEERIM SHAMUDINOVA

**Manager**, Director of "Building Air Quality Management Capacity in Central Asia" Project



## GULMIRA ESENGELDIEVA

**Project Manager**, Coordinator of activities aimed at promoting green energy in Kyrgyzstan



## AZHAR BAISALOVA

**Project Manager**, Consultant for "Implementation of a Low-cost Air Quality Sensor Network in Central Asia to Improve Air Quality through Capacity Building and Increased Public Awareness" Project, Specialist in Project Management, Urban Governance, and Urban Policy



## TOLGONAI ELEMANOVA

**Coordinator** of the Central Asian Air Quality Platform (AQCA); Project Coordinator for "Involvement of civil society in the new residential area Altyn-Kazyk for conservation and protection of Ala-Archa water reservoir"

# OUR TEAM

## EXPERTISE



## INNA BRUSENSKAYA

**Expert** in Air Quality Analysis. PhD (kandidat nauk), Trainer, and Expert of the "Building Air Quality Management Capacity in Central Asia" Project



## MEDER ALIEV

**Water Quality Expert**



## ATAKHAN TALANTBEK

**Data Manager**

# COMMUNICATIONS



**NAZGUL KOILUBAEVA**  
Communications Expert in Fundraising



**GILDANIKA OSMONOVA**  
Communications Coordinator



**MUNARA BOROMBAEVA**  
Community manager



**VERONICA KHODZHICH**  
SMM Specialist, Graphic Designer  
and Videographer



**MALIKA MAMYROVA**  
Content Creator

# FINANCES



**GULMIRA KOIBAGAROVA**  
Chief Accountant



**VENERA SHARSHEEVA**  
Accountant