



Ukrainian Environmental Club

**GREEN WAVE**

BIENNIAL PERFORMANCE REPORT

**2018/2019**



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## Introduction

*I can confidently say that 2018 and 2019 were crucial years in Green Wave's history.*

*We were working hard and productively, not only making our professional dreams come true through implementation of various projects, but also – for the first time for our civil organisation – made a significant effort to build the strategy, reinforce the internal structure of the team and tidy up our “environmental family”.*



*Over these two years, we were studying the capabilities of urban ecosystems to adapt to climate change, making environmental games, attending various training events, conferences and environmental workshops, creating methodological guidelines for extracurricular awareness-raising activities “Eco School”, receiving support from charity foundations and environmentally friendly businesses, engaging volunteers, and advocating environmental issues in Ukraine. We were learning a lot as well as teaching others, our team has improved our subject-matter knowledge, and outlined the strategical goals to be pursued over the next three years.*

***With a lot of inspiration, we are moving forward and invite you to join us in our important journey towards the common safe and environmentally friendly future.***

***Promoting development by protecting the nature!***

**Oleksandra Khalaim**

CEO, Green Wave

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## About us

**Ukrainian Environmental Club “Green Wave” is a team of professional environmentalists, trainers and environmental activists in Ukraine.**

**Active since 2008.**

**Mission:** For the sake of the present and future generations, we protect the environment and contribute to mitigation of negative environmental impact through promoting environmentally friendly lifestyle and raising awareness among children and adults.

**Motto:** Live ecologically: green light to green ideas!

## Our values

- **Integrity.** Our team members live the eco-friendly lifestyle which they promote in public.
- **Unforced environmental activism.** Soft approach will help people become environmentally responsible.
- **Professionalism.** Every team member strives to be ultimately professional. We are constantly learning and improving our skills.
- **Credibility.** We at Green Wave always check any information that we use in our work, and condemn any unfair practices or manipulations with **environment-related information**.
- **Support.** We support environmental initiatives of individuals, organisations and informal groups. We support initiatives of our team members, experts and volunteers.

## Areas of activity

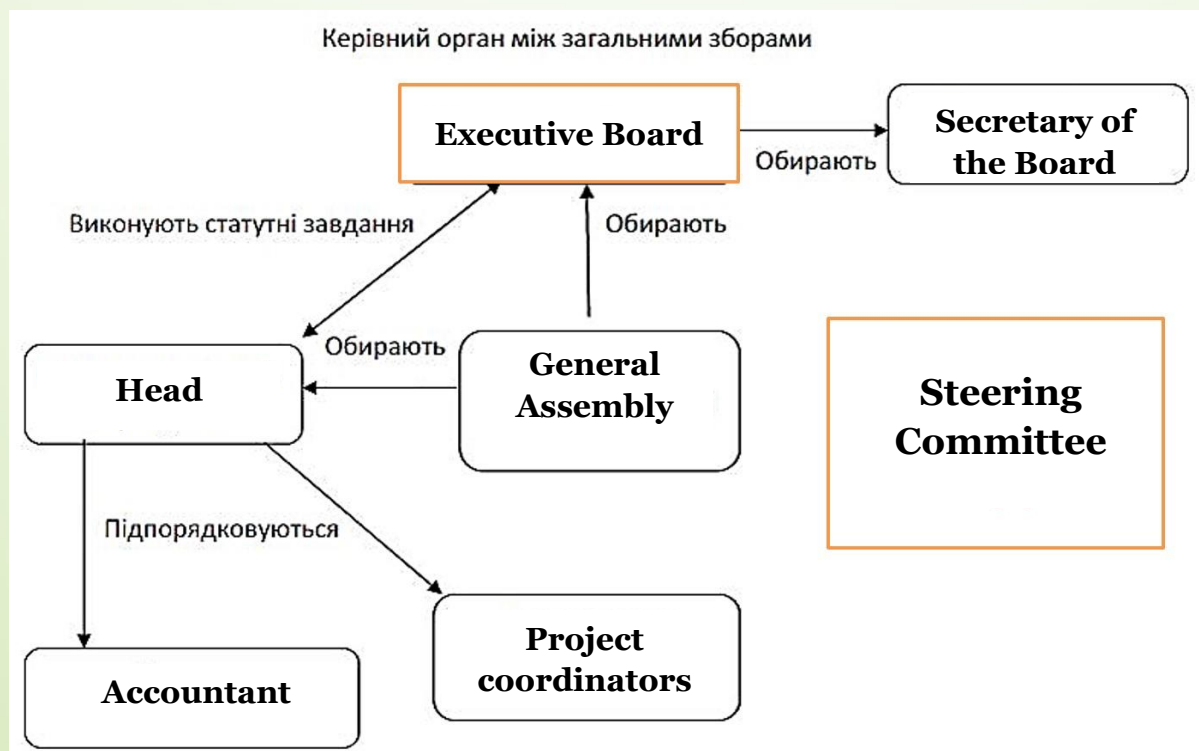
- ✚ **Education for sustainable development** (introducing game-based learning in environmental education);
- ✚ **Environmental education advocacy;**
- ✚ **Combating climate change** (public activism and urban greening research);
- ✚ **Environmental aspects of corporate social responsibility** (incorporating green office ideas into an organisation's daily routine);
- ✚ **Supporting public environmental initiatives.**



## Membership in national and international organisations and cooperation

- member of Climate Action Network International (Eastern Europe, Caucasus and Central Asia) since 2019: [CAN EECCA](#)
- observer to the United Nations Framework Convention on Climate Change since 2019
- member of [Ukrainian Climate Network \(UCN\)](#) since 2014. Attending annual meetings, voting and involvement in climate change awareness-raising and adaptation
- cooperation with the WWF International's Danube-Carpathian Programme since November 2014
- in 2013, became the first Ukrainian civil society organisation to obtain the status of "NGO – National supporter of [Gold Standard](#)" in Ukraine, may attend public hearings and provide its official comments on projects that reduce greenhouse gas emissions, contribute to sustainable development and are submitted for the Gold Standard certification
- member of the [UN Global Compact](#) in Ukraine since 2010

## Green Wave's updated structure (2019)



## COMBATING CLIMATE CHANGE

### Adapting to climate change: urban green zones as safeguards of residential districts

During the [project](#), a team of researchers from the country's leading research institutes was investigating the role of Kyiv's urban green zones as safeguards from adverse impacts of climate change (heat waves and abnormal air temperatures in summer). For this purpose, in July and August 2018 we analysed the following parameters in residential districts of Kyiv with various levels of greening and under both hot and comfortable weather conditions:

- efficiency of courtyard shadowing by trees and buildings;
- daily dynamics of air temperature change on open sunlit surfaces and under the trees;
- physiological activity of various species of trees.

Our team picked 4 residential courtyards of the Holosiyivskiy District in Kyiv, all with varying levels of greening: 13%, 21%, 25% and 33%. We conducted **3 sets of case studies**:

1. Measuring of air temperature changes (16 standalone portable sensors located on open sunlit surfaces and trees with moderate and strong shade; temperature was measured every 10 minutes round the clock for 14 days);
2. Using UAVs for thermal imaging of courtyards (drone DJI Inspire-1 with thermal camera Flir Vue Pro R from the height of 100 m)
3. Measuring the photosynthesis intensity of 4 species of trees commonly found in Kyiv's residential courtyards (tilia, acacia, will and maple) under both hot and comfortable weather conditions.

The studies have shown that the negative impact of "heat waves" in summer can be significantly reduced through correct planting of trees taking into consideration shadows cast by the buildings. On the opposite, trees planted in places that are always shaded by buildings bring less value in shaping the microclimate.

Combining various levels of greening (trees / bushes / lawns) in





residential areas is more efficient from the perspective of ground cooling in hot weather as opposed to planting trees only. Even big trees, when placed in the part of the courtyard that is always covered by shade, do not make a significant contribution into building a comfortable microclimate during the summer “heat waves”, if there are large open ground or asphalt surfaces adjacent to them.



### Study summary:

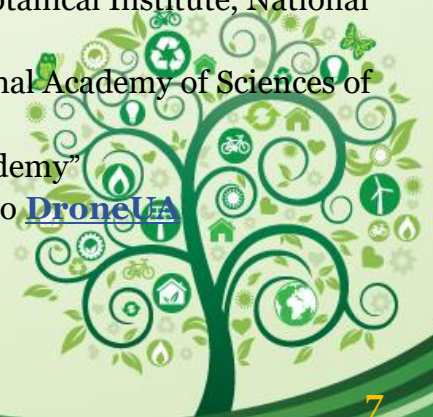
- Climate change is our reality. We need to protect every tree in residential courtyards of multi-storey buildings for a comfortable life!
- According to State Construction Regulation “B.2.2-12: 2018. Urban Planning and Construction”, at least **25%** of the urban residential areas must be covered by vegetation. State Sanitary Rules 173 “State Sanitary Rules for Urban Planning and Construction” set the standard of **40%**.
- We believe that **at least 30 %** of the total built-up area must be covered by vegetation.
- Landscape planning should also take into consideration the heat tolerance of various tree species and how each courtyard will be shadowed.
- Also, advise to housing cooperatives and utilities companies to incorporate climate change considerations into urban greening activities.

[Watch a video about our study](#) and a visual representation of our findings!

The study was conducted with the support from [National Geographic Society](#) Explorers Program @insidenatgeo

### Research team:

1. Oleksandra Khalaim, PhD in Biology, Ukrainian Ecological Club “Green Wave” (National Geographic Society grantee)
  2. Taras Kazantsev, PhD, Scientific Centre for Aerospace Research of the Earth (CASRE), Institute of Geological Sciences, National Academy of Sciences of Ukraine
  3. Oleksandr Polischuk, PhD in Biology, M. Kholodniy Botanical Institute, National Academy of Sciences of Ukraine
  4. Igor Panas, O. Palladina Biochemistry Institute, National Academy of Sciences of Ukraine
  5. Olena Zabarna, National University “Kyiv Mohyla Academy”
- Acknowledgements for technical support of the study to [DronetUA](#)



## ENVIRONMENTAL AWARENESS FOR YOUTH: Ecoschool Project

In 2018 and 2019, Farmak PJSC and Green Wave jointly launched a series of extracurricular lessons to raise environmental awareness of school students.

**The goal of the project** is to bring the city's youth community together and make it an environmental asset, promote environmentally friendly lifestyle among young people, and improve the culture of resource and energy saving.

**The training programme** consists of 4 sections broken down by topics (for more information, please see the [presentation](#)):

- (1) "I and Nature" (human impact on natural ecosystems, global challenges and environmental problems of the 21st century);
- (2) "Nature and I" (understanding the various relations in nature and human place in the eco-system);
- (3) "I and Energy" (energy sources and energy efficiency);
- (4) "Project Management" (fundamentals of writing project applications and ideas for environmental projects).



The final stage of Ecoschool is a project application writing competition between schools, where top three applications receive financial assistance from Farmak PJSC. The aim is to implement environmental projects at schools and launch an environmental initiative in the city.

Training in each thematic section is delivered in form of ecological games and involves two-way training methods. Our motto is "No to boring lectures!". The emphasis is made on students rather than the trainer, because their personal experience is the learning foundation.

Green Wave has authored methodological recommendations and an extensive project programme. The Ecoschool Training Handbook was approved by the Ministry of Science and Education of Ukraine for use in secondary education settings.

### **Project timeline:**

#### **2018-2019:**

Organisation of a series of extracurricular awareness-raising lessons for 6 to 11 grade students in Kyiv (10 schools in Podilskiy District) and Shostka (10 schools in the city).

#### **2019-2020:**

Establishing and managing of online remote learning platform "Ecoschool": <https://ecoschool.com.ua/>





Read more about this project on Ecoschool's official Facebook page:  
<https://www.facebook.com/EcoschoolFarmak/>



## Project “Start Small: Environmentally Aware Parenting”



As professional environmental educators with more than 5 years of training experience, we know it for a fact that emotional affinity toward nature is crucial for shaping environmental awareness. Feeling the natural environment and understanding the value of resources at a young age is essential in the era of the global ecological crisis.

Those of our team members who have kids face the traditional challenge - huge spendings of material resources and efforts to buy toys, to find out “how to spend quality time with a kid”, “top 10 games for kids”, “fun outdoor games for kids”, “things to do at home on a rainy day” etc. Early childhood development practices, arts and sports - all of us try to offer the best to our children. This variety of eco-friendly and healthy “substitutes” of traditional entertainment centres encouraged us to create a comprehensive programme for kindergarten staff and parents with kids 3 to 5 years of age – “**Start Small!**”.

### **Our tasks:**

- Guide parents and kids to eco-friendly living
- Give answers to the following question: What environmental problems are a threat to the plant and to us in the nearest future?
  - Benefit from experience of other countries, which is very useful and important now.
  - Help parents shape their vision and approach to the following question: how to use environmental education to improve the quality of time spent with kids?
  - Study, together with parents, ways to make life more eco-friendly
  - Provide parents with a tool set for outdoor games and activities for kids.

The project involves a series of training courses for parents and caregivers. **The objective of training activities** is to provide practical tips and methods how to talk about complex things in simple words and give children a basic understanding of the importance of resources (water, electricity, paper and food waste) and tips on their sustainable use (composting, upcycling etc) in a game-based and interactive format. We offer an unforced combination of theoretical and practical lessons that will give you knowledge and skills to make the space inside and





outside your home more environmentally-focused, as well as a set of games and exercises aimed to boost environmental awareness and action among both parents and kids and to answer the everlasting question “what can be fun to play with my kid”.

**Zlata Mykhalchuk**, one of the project coordinators, is a practising psychologist, conducts training courses for moms that are adapted to involve kids, too, Mama-Mafia presenter, mom “on almost a maternity leave” and Green Wave intern, speaks about eco-parenting:

*I thought that with the birth of our son our efforts toward Zero Waste will no longer be successful. They are :). Of course, it is not always smooth, but all in all it has not turned out to be as bad as I had thought it would be. Yes, we are not a perfect zero-waste family, but we segregate recyclable waste, and the kid helps us with that. We do try to compost, we re-use things as much as we can, and we are looking into ways to avoid plastic materials in games where possible. My dream is that we have a diaper recycling plant and other eco-infrastructure in Ukraine. Maybe, this is why I have been taking steps that will, hopefully, contribute to that. Surely, there are things we don't know and don't do, and some eco-solutions that might appear surprising, but I certainly want a better world not only for my son and my potential grandchildren, but for myself, too. Clean environment is not something that will exist elsewhere and at some other time: it is my life on this planet here and now”.*





## Environmental games: Development and Distribution

1. We have created, translated from English and adapted to use in Ukraine **2 new games; 7 board games and 15 active games are currently in use.**
2. Our website [has a dedicated page](#) where you can buy the hard copy of the games or download an electronic game handbook free of charge.
3. **From August to December 2019, we sold 14 game sets.**
4. **We are currently in process of translating another 2 to 3 games.**

## Environmental games: Project “Keep Cool!”

In **2018-2019** we became part of international project [“Keep Cool”](#) where players represent the world’s countries in international climate negotiations; the project was implemented in Eastern Europe (Republic of Moldova, Romania and Ukraine).

As part of the project, we have made a training programme and delivered 3 facilitator training courses (Kyiv, Lviv and Poltava) for at least 40 participants: 4 board games and 2 interactive packages (Green Pack, Citizen Pack).

More than 10 Keep Cool game sessions took place in Ukraine: Kyiv, Lviv, Ivano-Frankivsk, Poltava and Kharkiv; in Sweden: Stockholm, Visby and the Baltic Sea.

The project was conducted with the support of Deutsche Bundesstiftung Umwelt DBU, Humboldt University Berlin (Germany), NGO “Ecovisio” (Moldova) in cooperation with the partner network “Education for Sustainable Development in Ukraine”.



## Environmental games: Other Activities

1. **May 8-12, 2019, [29th Ukrainian Hike Gathering](#) “Cossack Trails”,** village of Vygrayiv. Tented camp, **approximately 1,000** of children, teenagers, volunteers and scouts from all over Ukraine.
2. **June 1, 2019, Public event [“My clean community”](#):** 100 participants and 30 eco-game sessions in three hours! With the support of [ULEAD with Europe](#) in Velyka Dymierka amalgamated community.
3. **August 5-7, 2019 [Summer Camp](#)** of Bezmezh Private School
4. **October 12, 2019, [IV Forum M18](#) “Under 18 - We Can Do More!”**



## STRENGTHENING INSTITUTIONAL CAPACITY:

### Project “Through Personal Development to Positive Eco Changes in the Society”

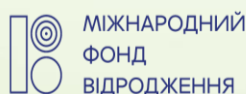
The EPAIU Programme “Strengthening the Organisational Capacity of the Environmental Civil Society Institutes”

The project was carried out from September 2019 to April 2020 (Stage 1) within the scope of the Environmental Policy and Advocacy Initiative for Ukraine that is implemented by International Renaissance Foundation with financial support of Sweden.

The initiative is aimed at developing the civil society institutes – institutionally capable, with good-faith management, accountable and reputable in the environmental community – that would contribute to reforms in Ukraine through introduction of environmental practices and advocacy of environmental protection.

#### **Key areas of activity:**

- Restructuring of NGOs to separate the tiers of governance and management: Board of Directors / Council / General Meeting;
- Preparation and implementation of documents and procedures (conflict of interests procedure, delegation of authority procedure, procurement procedure, job descriptions for staff and external experts, rules for internal and external communications, etc.);
- Strengthening institutional capacity (2023 development strategy, 2023 fund-raising plan, training courses on communications, legal matters, financial management, marketing, and environmental awareness);
- Improving hardware and software infrastructure (laptop, Windows, Office, 1C);



website update.



## Brief financial report

### Budget 2019: UAH 230,260, including:

1. Subject-matter advisory services UAH 34,100
2. Direct project-related expenses UAH 23,900
3. Bank fees UAH 7,800
4. Salaries UAH 74,500
5. Social payments UAH 39,800
6. Software UAH 8,000
7. Fixed assets UAH 10,000
8. Accounting services UAH 27,060
9. Website hosting and maintenance UAH 2,500
10. Miscellaneous UAH 2,600

Financing in 2018: UAH 257,900

Financing in 2019: UAH 253,800

#	Project	Donor and contribution	Timeline
1	Distribution of Keep Cool game	NGO Ecovisio, Moldova <b>€5,000</b>	April 2018 to December 2019
2	“My Clean Community”	U-LEAD, GIZ <b>UAH 53,300</b>	April-June 2019
3	EPAIU organisation development project	International Renaissance Foundation <b>UAH 145,300</b>	September 2019 - April 2020
4	Ecoschool Project eco-educational online platform	Farmak JSC <b>UAH 32,700</b>	April-June 2020
5	Charity contributions	<b>UAH 55,200</b>	2019





## Our team in 2019

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*Mykola Shlapak*

*Maryna Potriyna*

*Liliya Yurkiv*

*Oksana Sida*

*Oksana Kravchenko*

*Olga Banovska*

*Galyna Stets*

*Galyna Mykhalchuk*

*Iryna Sankivska*



**Kyiv, 2019**

