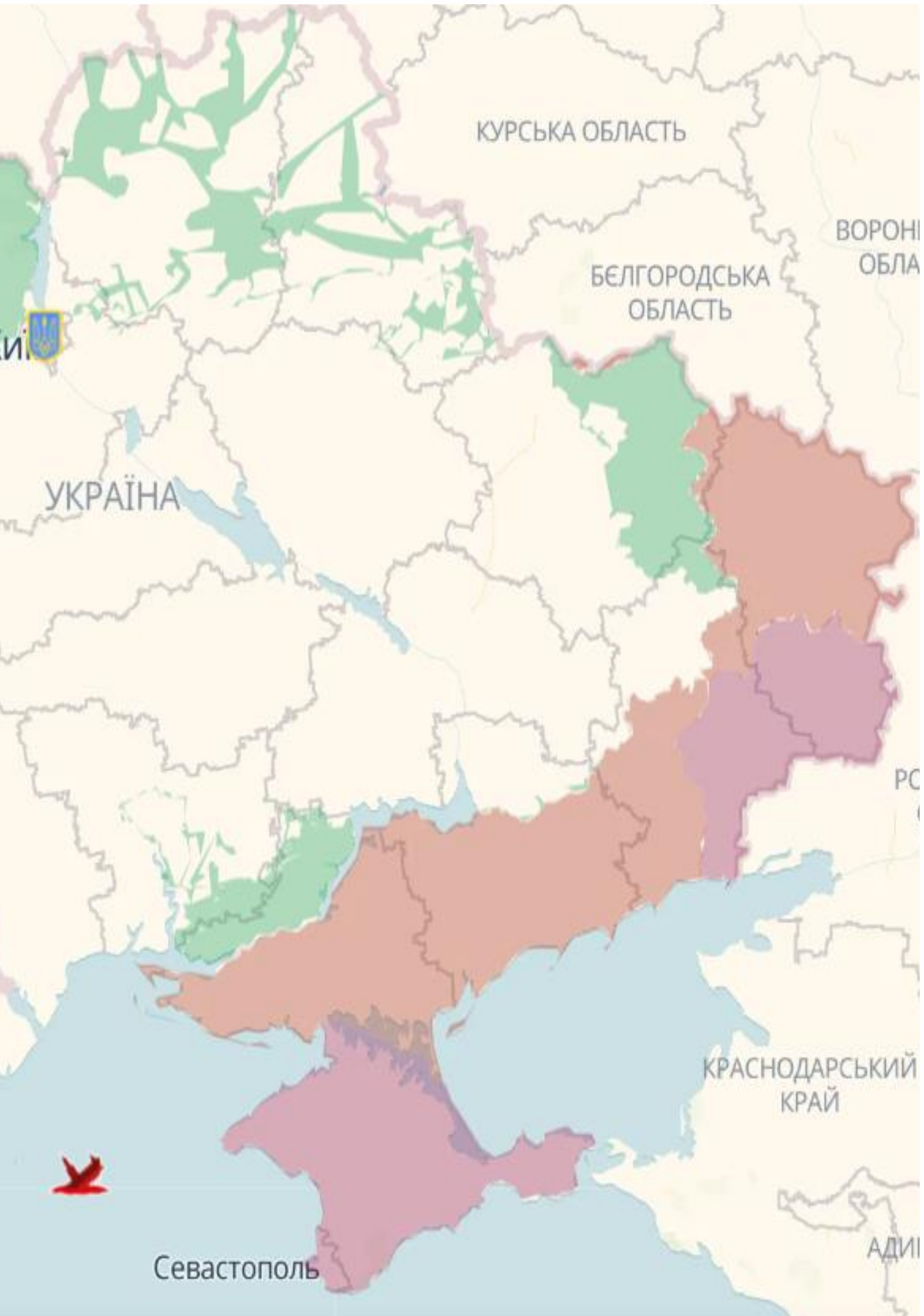


NovaVODA

care for people - respect for nature





PROBLEM

- Water supply system destruction during the full-scale invasion in Ukraine

- Unstable power supply leads to disruption of wastewater treatment plants

- The lack of a centralized water supply and drinking water natural resource contamination due to military operations threaten the population's health.

- Open air textile waste accumulation due to people's home destruction.

Textile wastes: effective and affordable filter material

- **Porous structure:** Textile fibers have developed porosity and a large specific surface area, providing a high sorption capacity for contaminant retention.

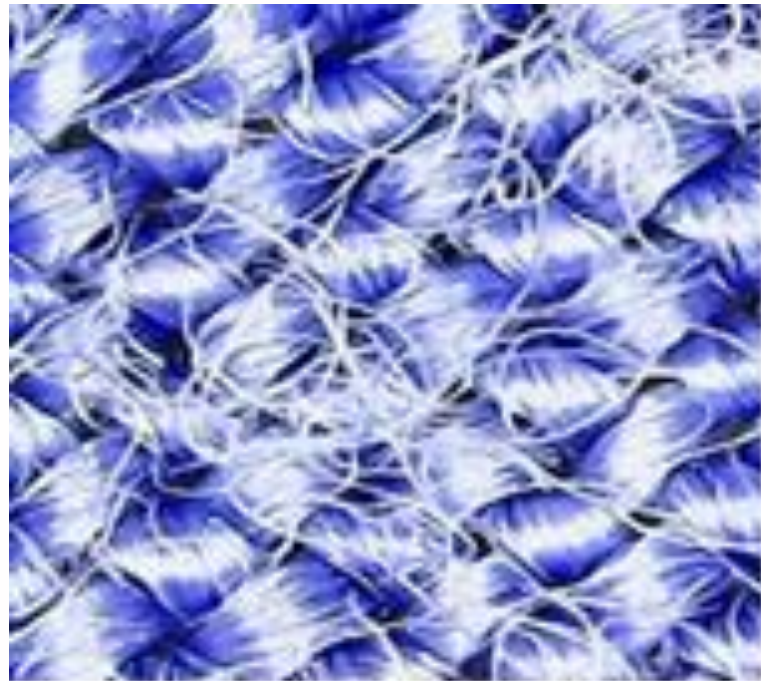
- **Proven effectiveness:** Studies have shown that cotton and satin are highly effective at filtering relatively large particles. The effectiveness depends on fiber type and weave.

- **Combinability:** Textiles can be used in modular filters with other materials to improve the purification from different contaminants` types



SOLUTION

Textile before filtration



a) cotton;



b) jeans;

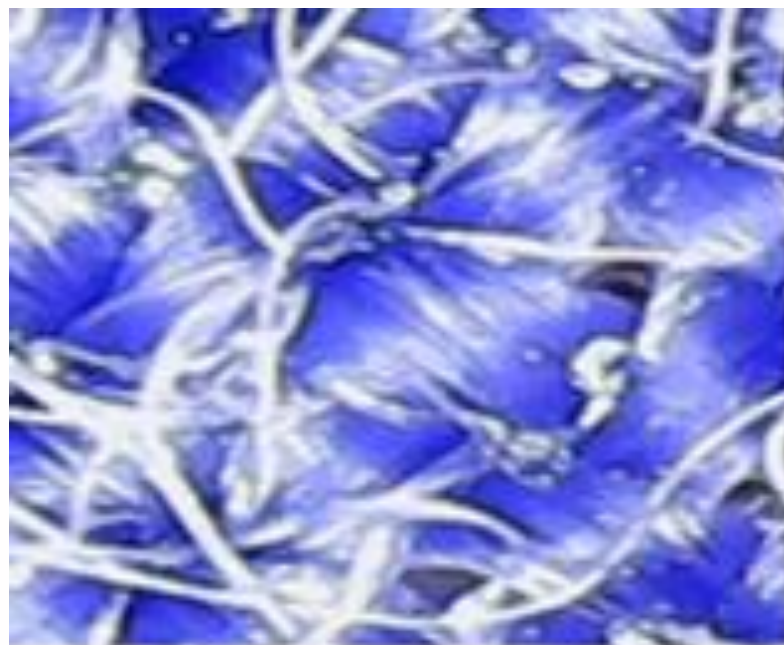


c) wool;

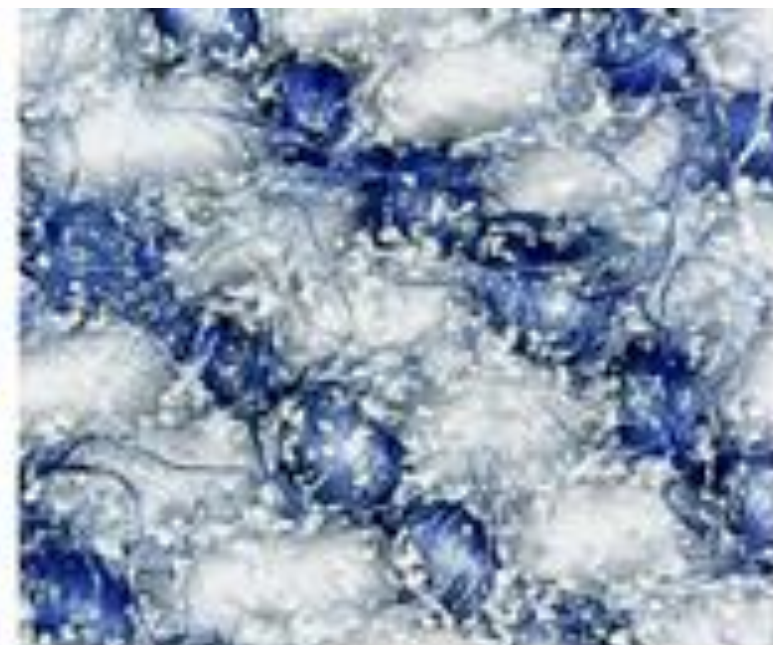


d) sateen

Textile after filtration



a) cotton;



b) jeans;



c) wool;



d) sateen

MARKET

TARGET AUDIENCE SEGMENTATION:

De-occupied territories: Free scientific and methodological resources in the application and paper booklets for making filters from locally available materials, including textiles.

Urban population and eco-communities: Commercial segment with laboratory-tested filters offered through online platforms and eco-retail.

Education sector: Scientifically based principles of textile filtration into curricula as a practical case study integration



SCALING POTENTIAL

Ukraine as a pilot site for implementation in post-war recovery conditions.

Expansion to markets of countries with similar environmental and infrastructure problems (Middle East, Africa, South Asia).



6 CLEAN WATER AND SANITATION



COMPETITORS

Competitive environment: Predominance of expensive solutions and complex centralized systems, lack of affordable, environmentally friendly and localized solutions.





NovaVODA

ADVANTAGES

Cost-effectiveness: Low cost due to the secondary resources use.

Localization: Use of local raw materials and production.

Scalability and modularity: Adaptation to different needs.

Eco-friendly product: Textile waste volume reduction.

Versatility: Application in different conditions (domestic, humanitarian, field).

Accessibility: Pricing policy focused on the economic situation in Ukraine.

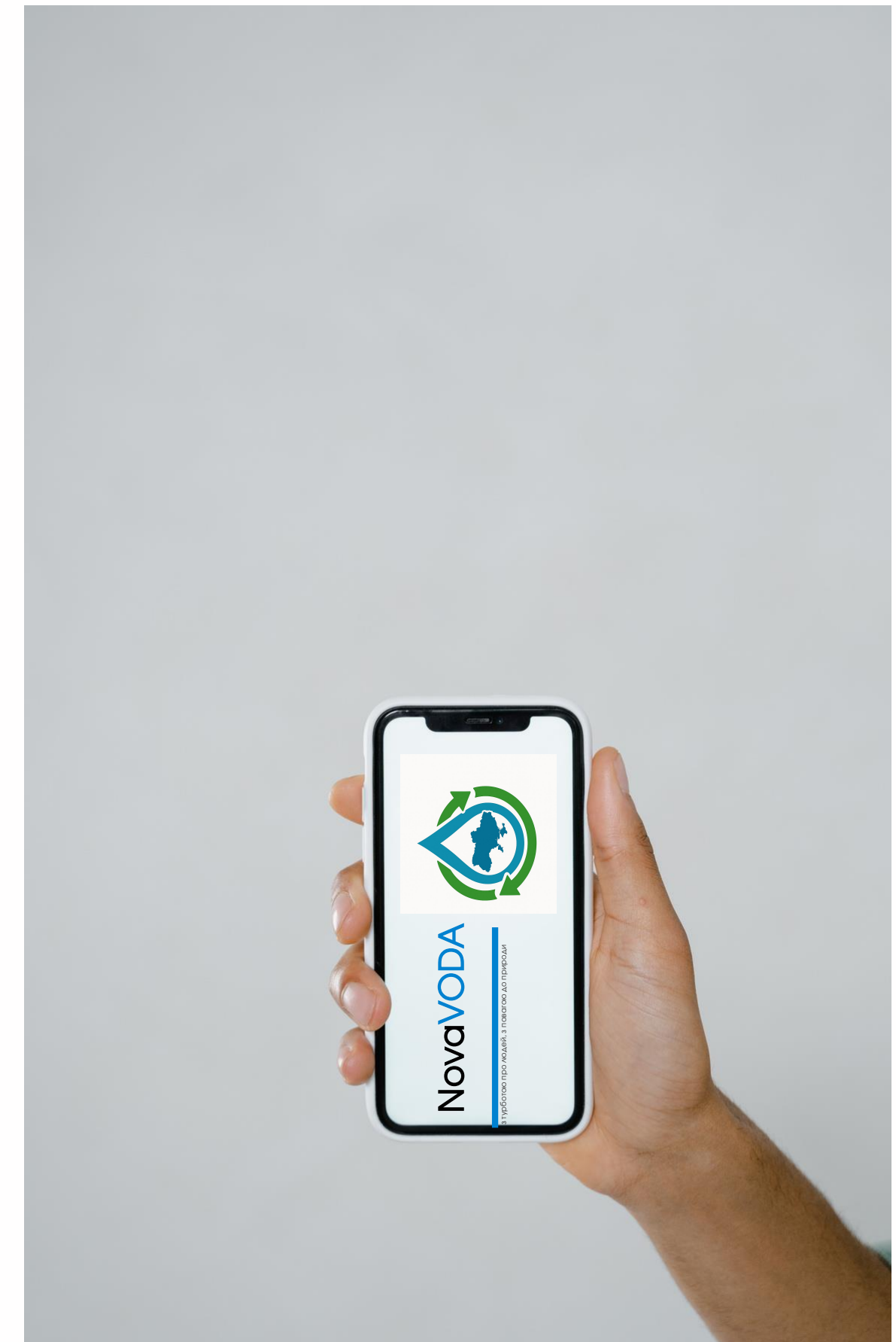
Links with Sustainable Development Goals: (SDGs 6, 12, 13).

The mobile application as a centralized platform for:

- Selecting water type and optimized filtration recommendations based on scientific data on textile fiber properties.
- Providing an evidence base on the effectiveness of different textile materials and their preparation methods.
- Step-by-step instructions for creating filters, which promote self-solution.
- Water quality data integration (if available) to recommendations chosen.

Digital strategy advantages :

- Wide reach of potential users.
- Scientifically based information and awareness raising.
- Creating a knowledge base and sharing experiences.
- Adaptability of recommendations to local conditions and available resources.



MARKET ENTRY

BUSINESS MODEL

A hybrid business model focused on social impact and circular economy

Economic component

Income structure: Sale of ready-made filters, subscription in the mobile application, grants and investments, educational packages/master classes.

Value delivery channels: Mobile application, website, partnership with NGOs and volunteers, and educational institutions.

Social mission as a key element:

30% profits reinvestment in filter production for humanitarian crisis areas free of fee.
Integrated “social contribution” indicator in the application for transparency.

Scaling strategy:

franchising model for local production, expansion of the recycled textile product line, and entry into the international humanitarian aid market.



NovaVODA

SCIENCE AT THE SERVICE OF HUMANISM AND SUSTAINABLE DEVELOPMENT

Interdisciplinary approach: A symbiosis of scientific knowledge, engineering skills, and social responsibility to develop an innovative and affordable solution.

The project's activities are aimed at achieving the UN Sustainable Development Goals:

Goal 3: Good Health and Well-being

Goal 6: Clean Water and Sanitation.

Goal 12: Responsible Consumption and Production.

Circular economy principles.

Integrating the principle of resource reuse, transforming waste into useful tools.

Ethical choice: NovaVODA is not only a technological solution, but also a conscious ethical choice in favor of humanity, dignity and recovery.



Our mission: To ensure every person's basic right to clean and safe water.

Our solution: Innovative, ecological, and accessible. We have developed a technology that meets the urgent needs of modern Ukraine and global challenges in the field of water resources.

NovaVODA is more than just filters:

- Deep understanding of the problems
- Comprehensive approach.
- Implementation of the Sustainable Development Goals: №6 (Clean Water and Sanitation), №12 (Responsible Consumption and Production), and №13 (Climate Action).

The path of NovaVODA is a path towards:

- Ensuring access to clean water for everyone, regardless of circumstances.
- Reducing the environmental burden through responsible consumption and waste minimization.
- Creating sustainable solutions for the future of Ukraine and the world.



TEAM'S WAY



TETIANA TYKHOMYROVA

Associate Professor
Project manager, mentor
Expert in sustainable development practices
Researcher
Public relations
tetiana.tykhomyrova@khpi.edu.ua



IRYNA KOSENKOVA

Student
Research on the provision of the population with additional resources
Project design
iryna.kosenkova@mit.khpi.edu.ua

N.V TEAM'S



VALERIIA KRIUCHKOVA

PhD student
Development of the concept of sustainable textile waste management
Experimental research
valeriia.kriuchkova@mit.khpi.edu.ua



ROSTYSLAV PITAK

Student
Investigates issues of anthropogenic impact on natural water
SMM specialist,
application developer
rostyslav.pitak@mit.khpi.edu.ua

NovaVODA

Thank you for your attention

