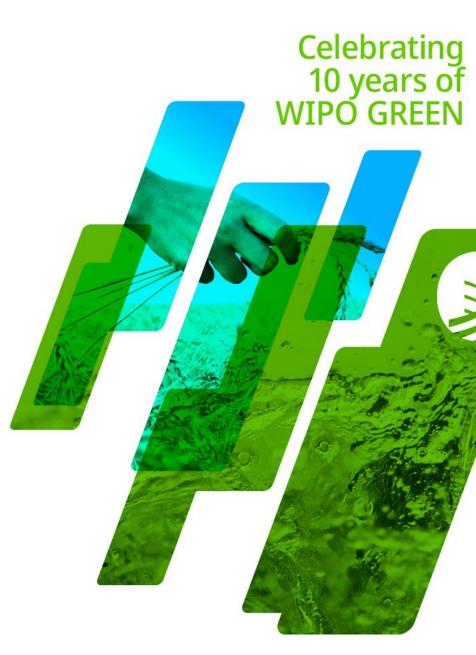
### Community of Practice Potential for Green Technology Innovation in Central Asia

Dmitry KALININ Central Asia Green Technology Project Implementer Climate Change and Food Security







April 23, 2024

## WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO) AND WIPO GREEN

- WIPO, UN agency for innovation, creativity and intellectual property (IP)
- Supports a just global IP system through 23 international treaties
- WIPO GREEN Technology matchmaking platform network of >150 partners
- Connects needs with green technologies and solutions for global challenges





#### WIPO GREEN – The Marketplace for Sustainable Technology

WIPO GREEN is an online platform for technology exchange. It supports global efforts to address climate change by connecting providers and seekers of environmentally friendly technologies. Through its database, network and acceleration projects, it brings together key players to catalyze green technology innovation and diffusion.



Green Technology Book 2022 Solutions for climate change adaptation

Read the full list of WIPO GREEN FAQs.

What are green technologies?

Read the book

## WIPO GREEN DATABASE IS A CENTRAL TOOL

Free UN-based public database

Major repository of innovative green technologies and needs

Automatic matchmaking

129.000 articles

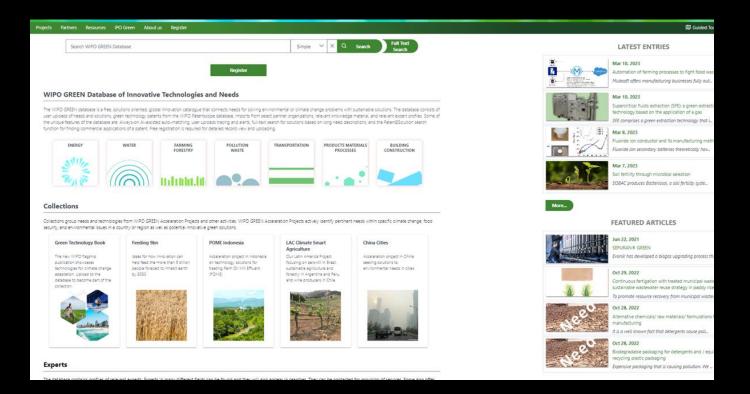
3900 user uploads

Simple registration and upload

No fees

Integrated experts database

Search "WIPO GREEN" and go to the database



## A CATALOGUE OF MORE THAN 600 CLIMATE TECHNOLOGIES

1st edition: climate adaptation technologies 2nd edition: climate mitigation technologies 3rd edition: TBD

607 solutions and counting – ranging from local and indigenous people's techniques to advanced and digital climate technologies

>1 million unique visitors

36,000 full book downloads

A free, digital-first publication

A source of technological inspiration

A matchmaking tool

A living collection









# INDIVIDUAL SOLUTIONS

#### WIPO

3. Agriculture and forestry / Irrigation / Proven technologies Smartphone control of alternative energy powered irrigation system



The founder of the Tech-Innov company, Abdou Maman, has developed a remote-controlled irrigation system adapted to the semi-arid conditions of Niger in West Africa. It introduces the concepts of digital farms and tele-irrigation in support of agricultural development in the country. The company provides farmers with tools enabling them to move away from manual watering and reduce water waste. The system uses mobile devices so farmers can manage irrigation remotely and efficiently. It also integrates hydraulic and meteorological data so farmers can optimize water usage.

Contracting type: For sale
Technology level: Medium
Country of origin: Niger
Availability: Niger

#### WIPO

(x)

4. Water and coastal regions / Marine ecosystems / Proven technologies Artificial reefs

Reefmaker



Reefmaker's patented process for artificial reefs uses Florida limestone. This soft rock matches the pH levels of the ecosystems targeted and provides a good substrate for marine life, allowing it to grow naturally. The limestone is attached to a concrete structure in a sloping design to ensure durability while increasing surface area for reef. A special deployment vessel equipped with cranes has been designed for accurate placement of the artificial reefs out to sea. In addition to coral reef restoration, the limestone reefs can also be used for oyster reef restoration, wave attenuation and erosion control. Structures can be designed to fit along the length of permanently fitted vertical poles attached to the sea bed. The aim is to keep the concrete proud of the marine floor and firmly retain the artificial reefs during extreme events like hurricanes. More than 50,000 reefs have been deployed along the US coast.

- Contracting type: For sale
- Technology level: Medium
- Country of origin: United States
- Availability: United States

#### WIPO

 $(\mathbf{x})$ 

X

5. Cities / Infrastructure and services / Proven technologies Decentralized water treatment and storage systems

Fluence Corporation



Resiliency in water infrastructure can be enhanced through decentralized water treatment and storage systems. Treating water at point of use can make water treatment more fit for purpose and effective compared to treating all water to a potable standard. Also decentralized water storage could be used for river flow management, irrigation or in emergency situations. Fluence is a company that provides modular, decentralized water and wastewater treatment solutions for remote locations. Water treatment systems are built into steel shipping containers. Transportation and site preparation is easy and installation quick. The technology has been developed for use in resorts and recreation sites. But similar solutions could potentially be used in emergency situations. For example, storms and hurricanes where central water supplies may be damaged or contaminated.

- Contracting type: For sale
- Technology level: Medium
- Country of origin: United States
- · Availability: Worldwide

## ACCELERATION PROJECTS

- Matchmaking projects with specific geographical scope and local partner implementation
- Active and focused matchmaking
- Identify needs and propose solutions
- Specific subject and location
- Work through local consultants
- Act as technology agent for need owners
- Matchmaking events as relevant
- Database is a central tool



- Active projects in:
  - China
  - Indonesia
  - Tajikistan
  - Latin America (Argentina, Brazil, Chile Ecuador, Peru, Uruguay)

## RECENT EXAMPLE: ACCESS TO WATER IN TAJIKISTAN

- Identifies potential users and their needs related to clear and safe water supply
- Find technologies that are feasible and resilient in mountainous, seismic zone
- Facilitate matchmaking process and implementation support
- Direct work with key stakeholders on-site
- Local consultant with solid competencies in technologies and business
- Dissemination of successful solutions in Tajikistan and beyond
- Project launched in 2023
- First solution deployed in 2024



## PROJECTS IN DEVELOPMENT

We prepare future projects in several countries of Asian and Pacific region, work with potential stakeholder, evaluate available solutions and sources of finance. The focus areas include:

- Access to clear water
- Water treatment
- Conservation Agriculture
- Food
- Waste management
- Clean energy
- Off-grid energy, heating and cooling

# HOW WE CAN CONTRIBUTE TO THE COP

- WIPO GREEN Database of Needs and Green Technologies
  - As a source of innovation and technology
  - Uploading and auto-matchmaking of needs/challenges
  - Discover knowledge material
- Green Technology Book as public inspiration of solutions and matchmaking
- Acceleration projects
  - Collaborate with CoP for finding solutions
  - Provide networks and experience for success
- In-house matchmaking on individual needs
- Intellectual property rights resource e.g. IP Management Clinics