

The People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Larbi Ben M'hidi University, Oum El Bouaghi



Faculty of Earth's Science and Architecture
Department of Geography and urban planning

Smart H2O start-up
An integrated service for reusing grey water

A Dissertation Submitted in Partial Fulfilment of the Requirement for the Degree of
Master in urban development

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2023-2024



Smart H2O Startup



SMART H2O

THINK SMART, DON'T WASTE YOUR WATER.
INVEST IT



<https://algeriantradehub.com/smarth2o.html>





SMART H2O

About The Startup

Our company offers an opportunity to reuse grey water in a professional and effective way, with the installation of an adaptable system based on the activity, the reuse option and the budget, and with a complete set of services that include consulting, design, follow-up work and maintenance.

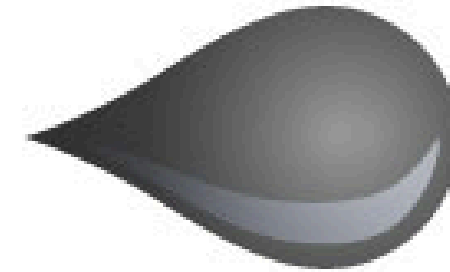
A startup in the recycling of grey water can be the best alternative since Algeria faces the problem of water scarcity and have great economic potentials in the future, we offer the service of design, a 3D representation of a separate system according to the client's demand, an installation of the system and a follow-up service to ensure the quality of water and the maintenance of the system, the system could be integrated in residential buildings, commercial activities and some industrial activities, it offers grey water when potable water is rare and a decrease in the water bills that are getting more expensive day by day.

<https://algeriantradehub.com/smarth2o.html> x



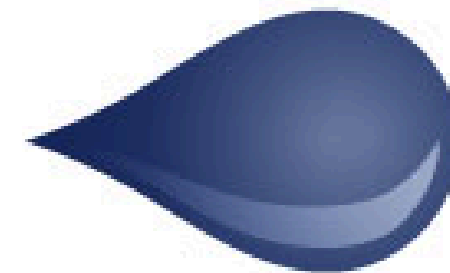
Blackwater

*Contaminated water
with toxic chemicals
and/or excrement*



Greywater

*Used water without
toxic chemicals
and/or excrement*



Clean Water

*Springs, wells,
purified water,
city water, rain water*



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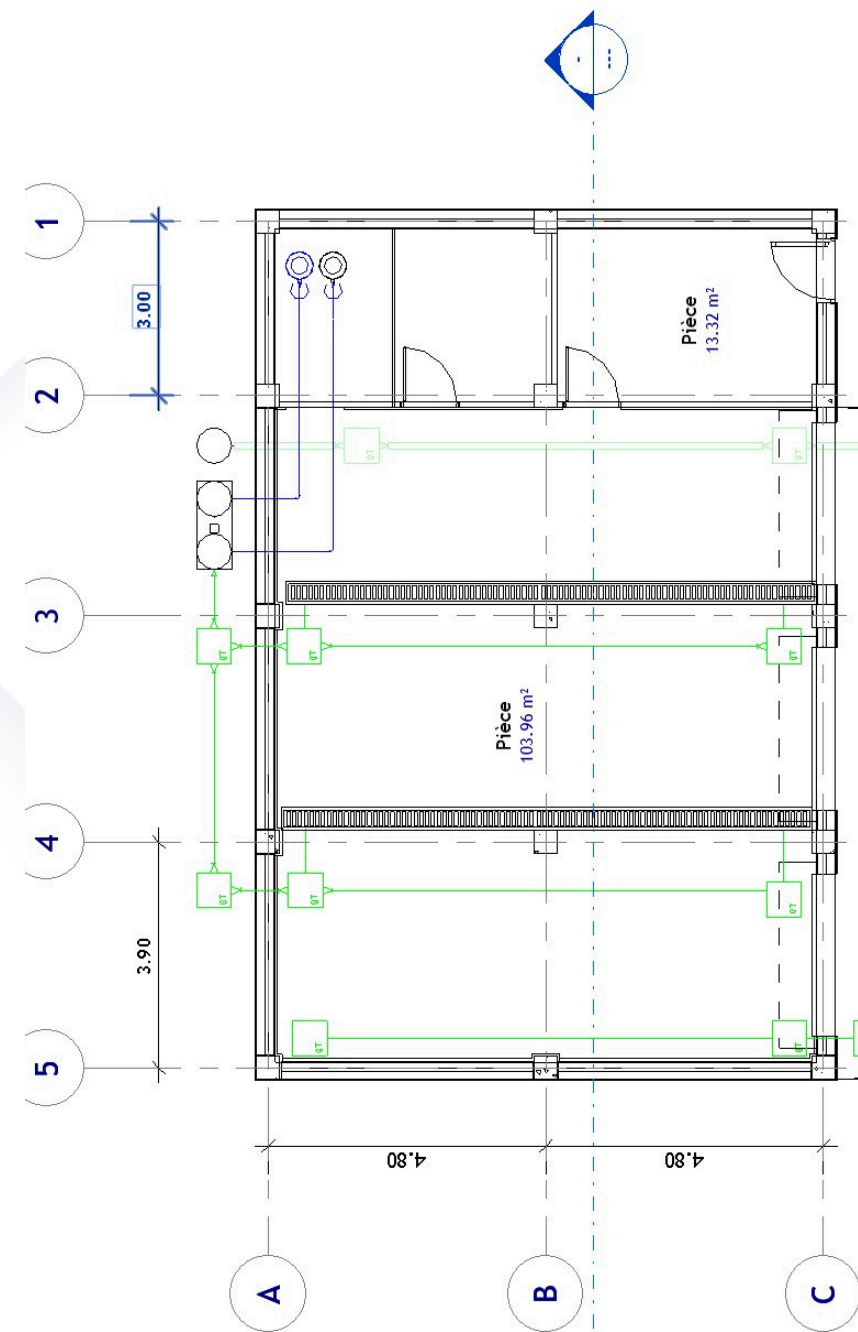
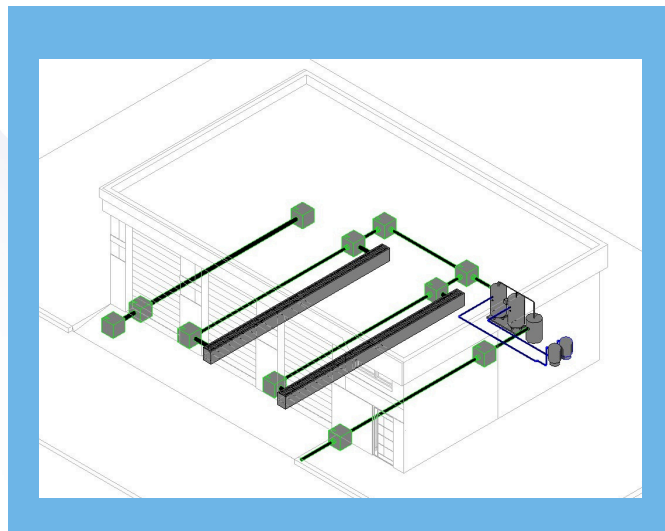
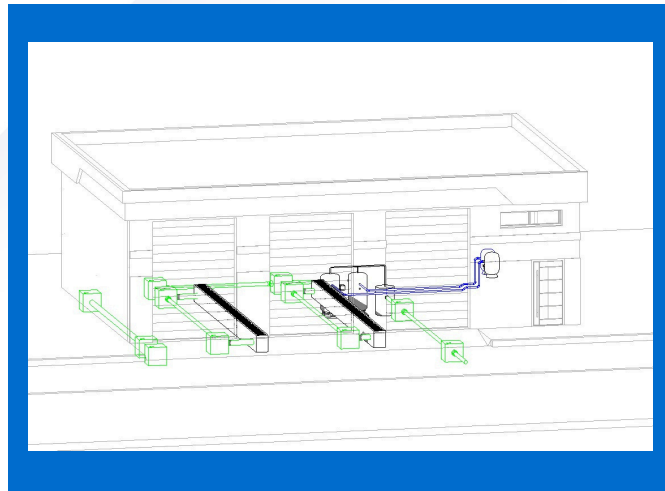
— Problem Statement

Like most countries in the world, Algeria is one of the countries that suffers from a severe shortage of fresh water, due to several factors such as the temperature that rises globally and lack of renewable water resources, in addition to the growing population and the increasing improvement in the standard of living of citizens and industrial activity, the situation will be more severe and dangerous in the future.

The best example of this is the state of Tiaret. Several areas in the state of Tiaret, western Algeria, are suffering from a complete cut off of drinking water in homes, so that the residents of the state are experiencing a stifling crisis, which has prompted the people to protest, demanding that their country's government resolve the crisis as quickly as possible.

So, as fresh water becomes increasingly scarce, greywater reuse becomes a sustainable option!

<https://algeriantradehub.com/smarth2o.html> ×



Problem Solution

- Smart H2O, the first Greywater recycling startup in Algeria, that offers the service of providing Greywater by taking care of the complete process of creation of an adaptable separation of system and transform grey water from waste water into a usable resource for irrigation, cleaning and even in the industry.
- The startup aims to reduce fresh water consumption and pressure on water resources. Recycling car wash water is another innovative solution to environmental and economic issues. The startup is designing a system that collects and treats waste water to remove dirt and contaminants, and reuse it for future washing. This innovative idea from Smart H2O aims to conserve natural resources and reduce environmental impact.
- By adopting water recycling techniques, laundry owners can reduce costs and improve operational efficiency, ultimately addressing water shortages and improving water resource management in Algeria.



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SMART H2O

Market Opportunity

Target Market

- Individual Homeowners
- Factory Owners
- Car Washes
- Real Estate Promoters
- Farmers

Key Partners

- Algerian Water - Partnership with the national water authority.
- National Cleansing Bureau - Collaboration for environmental compliance.
- Special Studies Office - Technical and environmental consultancy

Growth Potential

- Water-consuming economic activities
- co-operate with the government in residential projects
- Major industrial projects



Business Model Canvas for Smart H2O Startup



Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> Algerian Water - Partnership with the national water authority. National Cleansing Bureau - Collaboration for environmental compliance. Special Studies Office - Technical and environmental consultancy <div data-bbox="389 921 823 1390" style="border: 2px solid blue; border-radius: 50%; padding: 10px; text-align: center; color: blue;"> <p>think smart, don't waste water, invest it.</p> </div>	<ul style="list-style-type: none"> Technical Study Phase - Conducting feasibility studies and system design. Customer Research - Understanding specific needs and preferences. Inspection of Installation Site - Assessing the site for suitable installation. Supply Provision - Providing necessary supplies upon customer request. Project Installation - Installing the gray water recycling system. Project Commissioning - Starting and testing the system to ensure functionality. <div data-bbox="833 964 1755 1414" style="border: 1px solid #00b09b; padding: 5px;"> <p style="text-align: center; color: #00b09b;">Key Resources</p> <div style="display: flex; justify-content: space-between;"> <div data-bbox="833 1084 1299 1271"> <p>General Resources:</p> <ul style="list-style-type: none"> Computer Electricity Installers & Maintenance staff Working space </div> <div data-bbox="1359 1103 1692 1335" style="background-color: #fff9c4; padding: 5px;"> <p>Supplies (if requested by customer):</p> <ul style="list-style-type: none"> Water tank for collection Water filter tank Pipes Water pump Water filters Valves </div> </div> </div>	<ul style="list-style-type: none"> Adaptable System - Customizable solutions for various types of gray water separation and reuse. Integrated Service - Comprehensive service including design, installation, and maintenance. Modern Technology - Utilizing advanced recycling and monitoring technologies. Ease of Use - User-friendly systems ensuring gray water is efficiently recycled on-site. Environmental Contribution - Promoting sustainability by enhancing water management and reducing waste 	<ul style="list-style-type: none"> Service Explanation - Educating customers about the system and its benefits. Answering Questions - Providing customer support and information. Social Media Groups - Creating a community to brainstorm ideas and share feedback. <div data-bbox="2195 964 2615 1414" style="border: 1px solid #00b09b; padding: 5px;"> <p style="text-align: center; color: #00b09b;">Channels</p> <ul style="list-style-type: none"> Social Media Marketing - Promoting services through social media platforms. Contractors - Partnering with contractors for installations </div>	<ul style="list-style-type: none"> Individual Homeowners - People looking to implement gray water recycling solutions in their homes. Factory Owners - Industrial clients needing large-scale gray water recycling systems. Car Washes - Businesses that can benefit from gray water recycling to reduce costs and environmental impact. Real Estate Promoters - Developers interested in adding sustainable water management features to their properties. Farmers - Agricultural clients needing efficient water management solutions for irrigation
Cost Structure			Revenue Streams	
<p>Rental of the Shop - Lease costs for the business premises. Workers - Salaries and wages for employees. Electricity - Utility costs. Computer - Technology and software costs. Tanks, Pipes, Filters, Pumps, Valves - Costs of materials and supplies Personal Charges - operational expenses.</p>			<p style="text-align: center;">www.reallygreatsite.com</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="2259 1545 2465 1763" style="background-color: #fff9c4; padding: 5px;"> <p>11700 100DA design Consultancy - 1m²/70DA</p> </div> <div data-bbox="2658 1545 2932 1725" style="background-color: #fff9c4; padding: 5px;"> <p>Service Price - 1m²/150DA for Regular Maintenance</p> </div> </div>	

Services



and Projections

PROJECTIONS

Near-term:

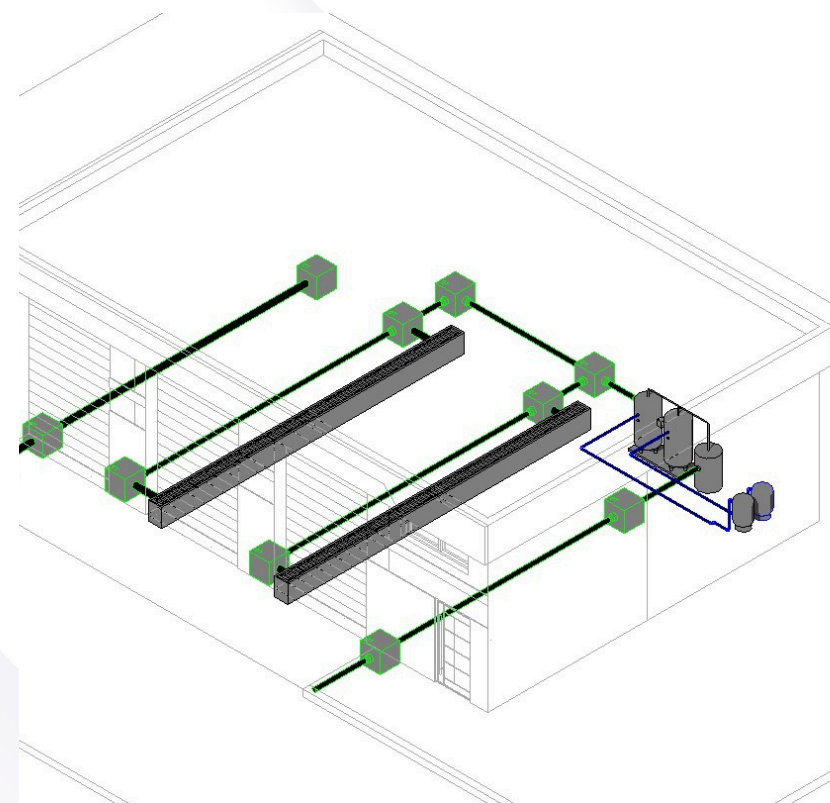
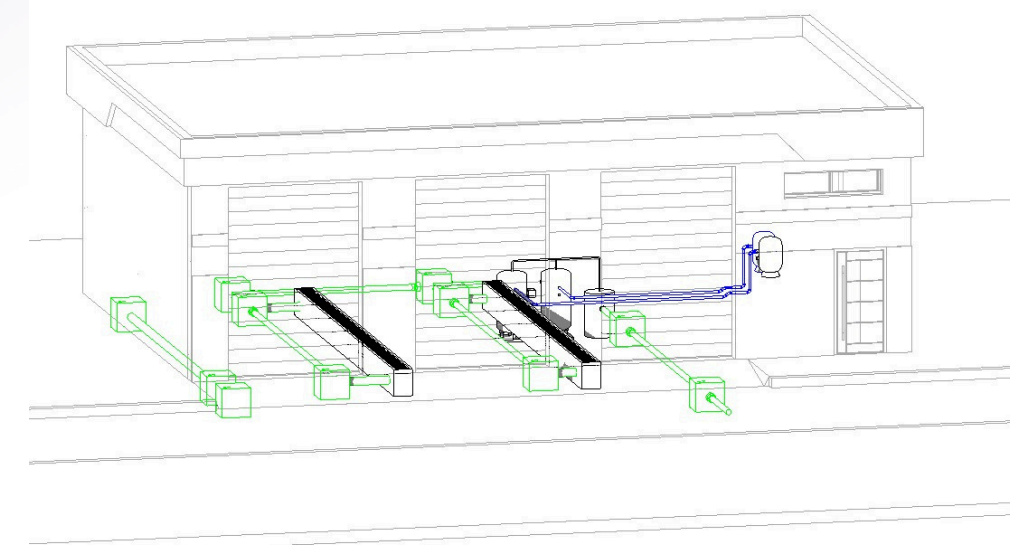
Installation of grey water recycling systems at the level of individual homes, group homes (intervention during the construction phase) and factories.

Long-term:

Expansion to cover larger areas such as:

- Large industrial units.
- Government (e.g. National Cleansing Bureau)

Consulting Services



Follow-up after
installation
in terms of system
or water quality



Thank You.

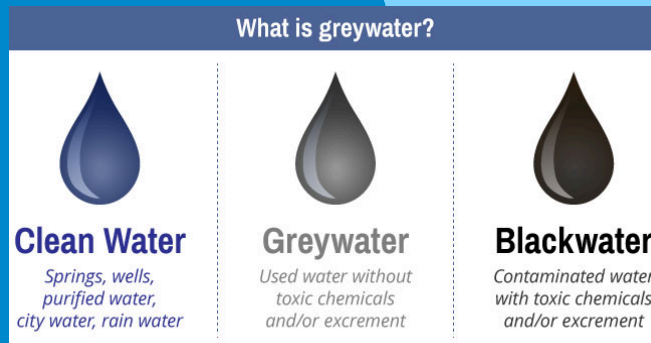
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REUSING GREY WATER NOT ONLY BENEFICIAL FOR THE PLANET BUT ALSO FOR YOUR POCKET

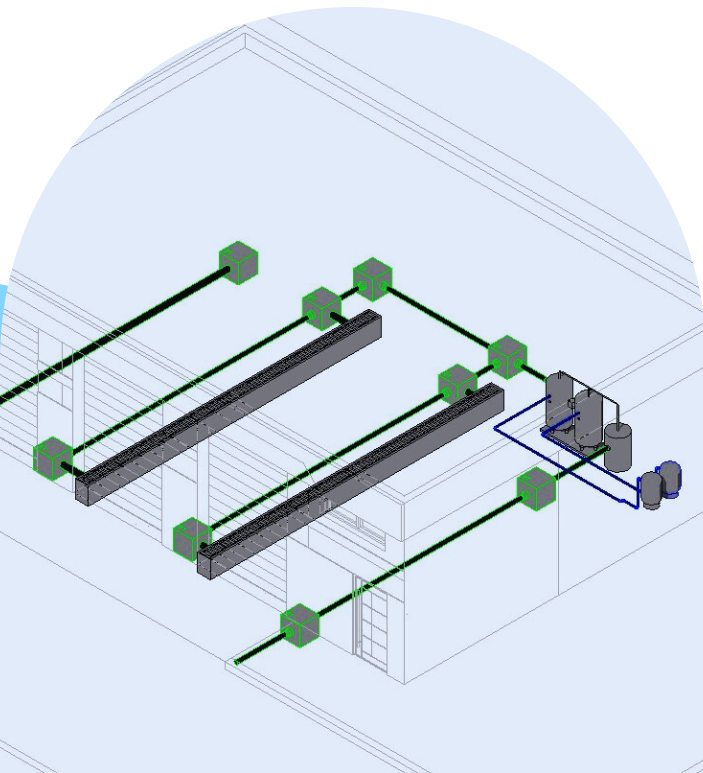
CONTACT US

WEBSITE:

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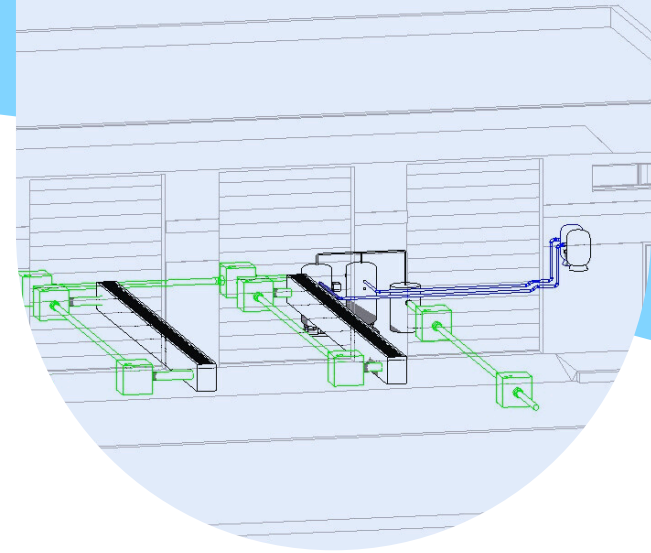


WE OFFER:

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BOOK AN APPOINTMENT NOW

For pricing and options, please email us at <https://algeriantradehub.com/smarth2o.html>