WtERT
Material AND Energy Recovery

“The Future of the World Depends on How Openly We Work Together”

Figure: imago images

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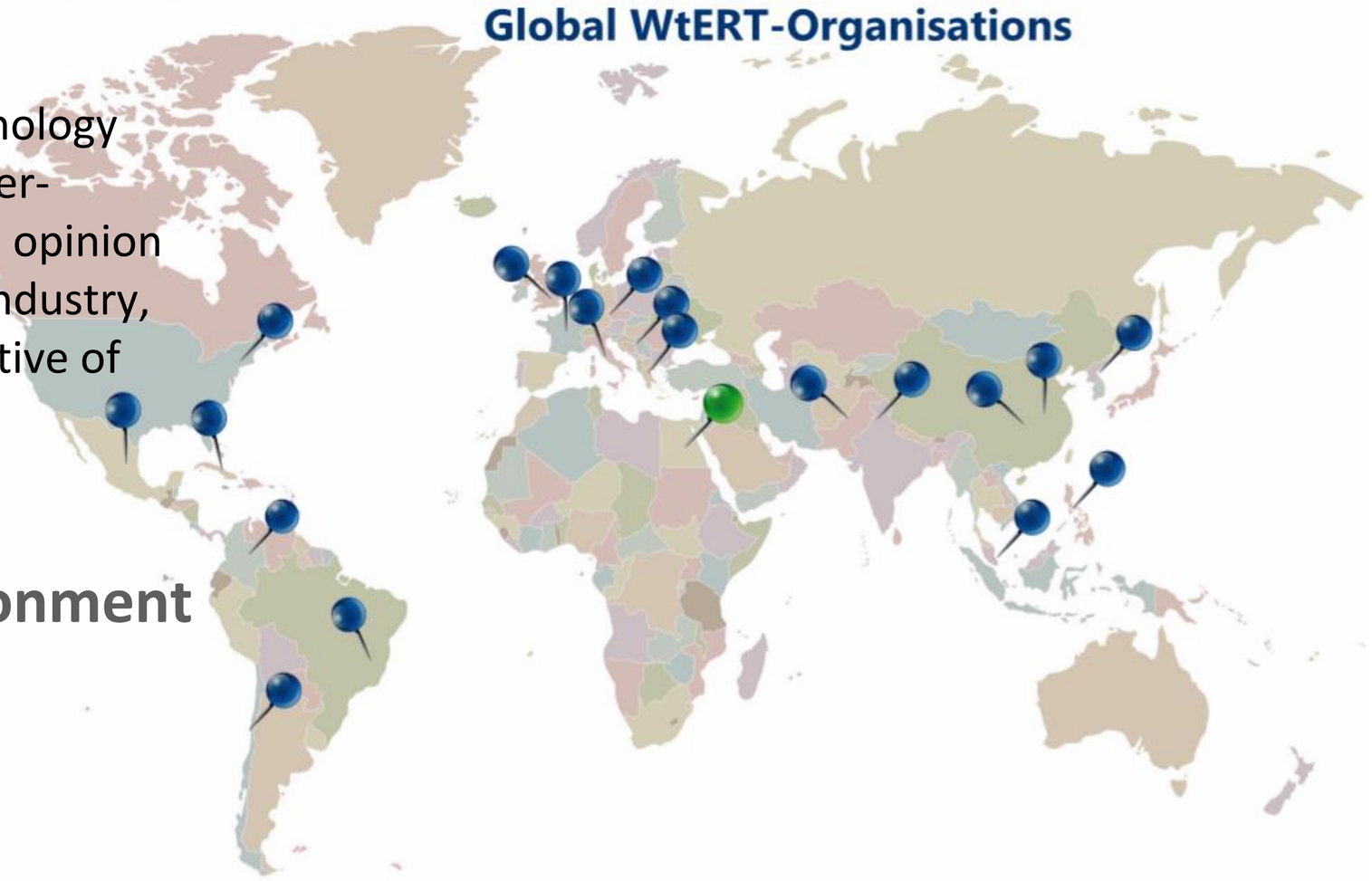
Identity – WtERT is on it‘s way to a co-creative, agile and transformative working community:

The Waste-to-Energy Research and Technology Council (WtERT) is an international top-tier-technical group that brings together local opinion leaders, experts and professionals from industry, science and municipalities with the objective of advancing the goals of sustainable waste management on a global scale.

WtERT acts …

… for the benefit of our environment and humanity.



~~Circular Economy~~

Circular Society

The change from „Circular Economy" to „Circular Society" is a societal approach, not just an economic one.

New forms of the production of knowledge and the participatory development of solutions are more likely to create promising approaches for a transition to the circular society than old ones.

Vision

We all live in a circular society where nothing is wasted!

Mission

In the WtERT Community we enhance the ability to understand, witness and raise awareness of existing problems and solutions in the field of waste and resource management.
We stimulate a significant change in communication of solid waste management - for the benefit of our environment and humanity.

Values

Open Source!
Open Source!
Open Source!

Most likely, there is already a solution to the problem - somewhere in the world.

Imagine the potential of a collective global brain concentrating on sustainable waste management!

Firstly environment - secondly economic interests!

Emergence

Interaction between experts and participants in a complex network is generating emergent solutions…

>>> See WtERT Case Studies about Material AND Energy Recovery, Techniques as Solutions, Tax Instruments AND Political Solutions.
>>> Finally, this Portfolio helps to Ensure the Mitigation of Greenhouse Gas (GHG) Emissions.

Best Practice

ANGed - Agence Nationale de Gestion des Déchets

Transfer Center of Kram, Tunisia

Transfer stations are of particular importance for the development towards sustainable waste management, as they are a...

Case Study

PadMad Kenya (Seren Associates Ltd)

Padmad, Initiative on reusable sanitary pad in Kenya

PadMad, co-founded by Madhvi Dalal, is a social enterprise that has worked in Kenya and Somaliland on addressing period poverty. PadMad introduced biodegradable, reusable...

Case Study

Composting of MSW in Salaj, Romania

The plant in Salaj, Romania uses the GORE® Cover Process Technology in order to compost the organic fraction from MSW whilst reducing odors and emissions. 6 GORE® Cover system...

Case Study

VIVO Kommunalunternehmen für Abfall-Vermeidung, Information und Verwertung im Oberland

The Waste Reloading Station of the District Miesbach, Germany

Up to 22,000 tonnes of waste by weight are pressed and reloaded...

Case Study

WtERT Germany

Tunisia: How to Run an Île de Propreté?

Developing Business Models in Sheltered Container Spots for a Decentralized Waste Handling by Involving All Participants

INNOVATION

University Stuttgart - ISWA

Ensuring clarity about the amount of biowaste helps to reduce it

Research project carried out by ISWA, University Stuttgart

Best Practice

AVA Abfallverwertung Augsburg GmbH

AVA (Waste Treatment Augsburg), Germany - Energetic and Material Recycling Under One Roof Leads to Considerable Synergies

The waste management companies...

Case Study

W. L. Gore & Associates GmbH

Composting of Sewage Sludge in Kirchbichl, Austria

The ARAB Kirchbichl plant in Tyrol, Austria uses the GORE® Cover Process Technology in order to compost sewage sludge whilst reducing odors and emissions. 6...

Case Study

STADLER Anlagenbau GmbH

Mechanical-biological treatment plant (MBT) in Granada, Spain

The plant Ecocentral Granada was a renovation and an expansion of the old sorting and composting plant Loma de Manzanares. It is a hybrid...

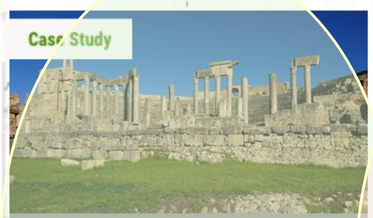
Case Study

Coliba Ghana Ltd.

The Dansoman-Glefe community plastic buyback center in Ghana

The Dansoman-Glefe community plastic buyback center initiated by Coliba Ghana offers the avenue for community members to bring their...

Case Study



Municipality of Siliana

On its Way to a Cleaner City, Siliana Begins Operation of Tunesia's First "île de propreté"

Raising awareness for waste separation and environment among the population is the goal of our...

Case Study

Abfallwirtschaftsbetrieb Böblingen

El Guettar, Tunisia: Project Partnership of the Waste Management Company Böblingen, Germany

The project "Municipal Knowledge Transfer Maghreb-Germany" between the waste manage-ment company of...

Best Practice

AWB Abfallwirtschaftsbetrieb des Landkreises Neu-Ulm

The disposal and recycling center EWW of the District Neu-Ulm – Perfect Combination of Material and Energy Recycling, Germany...

Case Study

Kolics Company Ltd. (KoliKo Wear)

Kolics Converts Waste Textiles into Shoes and Bags, Ghana

Kolics Company Ltd. (KoliKo wear) is a social enterprise that seeks to support skilled and opportunity seeking youth to produce innovative products which are environmentally friendly.

Best Practice

Pollution Prevention in a Tunisian Hotel

Hotel Caravane Serail is a 50-employee, 399-bed hotel located at an oasis at the gate to the Sahara Desert. The area in which the hotel is located

Case Study

WEEE Centre

The WEEE Centre in Nairobi, Kenya and 15 Other Countries in Africa

The WEEE Centre, Nairobi Kenya offers recycling services for ICT waste to the general public, business,

Best Practice

Conversion of a lignite-fired power plant into a waste-to-energy plant using the example of the ZMS Schwandorf, Germany...

Composting of Organic Waste at the Simmozheim Waste Disposal Plant, Germany

With the introduction of the GORE® Cover technology in 2014, the composting plant could be

Case Study

Silla 2 Waste-to-Energy Plant, Milano, Italy

The Silla 2 waste-to-energy plant is located in the north-west area of Milan near the Figino district. The plant is able to treat over 500,000 tons of

Anti-Littering-Campaign in Reutlingen, Germany

In Reutlingen, 300 citizens have been showing their full commitment to their city for 15 years: They own a sponsorship for a "piece of

Business with Construction Waste in Gmund, Germany

BSA GmbH in D-83703 Gmund, a specialist waste management company according to the German §52 KrW-/AbfG, takes construction waste and processes it into

please see: EGIDD

Ensemble pour une Gestion Intégrée et Durable des Déchets en Tunisie (EGIDD)
Sustainable Waste Management for Tunisia

Partner:

Fraunhofer UMSICHT

WtERT Germany

m&s experts in markets and sciences

RSL Recycling Solutions Lippetal

Agence Nationale de Gestion des Déchets ANGed

وزارة الشؤون المحلية والبيئة

Municipalities of Siliana, Tabarka and Douar Hicher

Funded by the State of Bavaria

Gestion durable des déchets et économie circulaire en Tunisie II

Work Packages (WP)

- Decentralized collection close to households
  - Cleanness near households
- Optimized waste transportation
  - Improvement of waste collection (>99 %)
- Separation of organic waste from municipal waste
  - Lowered and simplified landfilling
  - Fertilizer / soil for farmers
- Separate collection of E-Waste (from municipal waste)
  - Decontamination of municipal waste
  - Recovery of valuable materials

WP 1 Sheltered Container Spots
Alle Gemeinden

WP 2 Waste transfer station PLUS
Siliana, Douar Hicher

WP 3 Composting and landfill support
Tabarka, Siliana

WP 4 Optimization of treatment plant incl. Upgrade with iCycle® plant
ANGeD

Knowledge Transfer **WP 5**

Workpackage 1: Île de propreté

The Problem

- Proken waste bins
- Irregular garbage collection
- Polluted areas

The Challenge

….

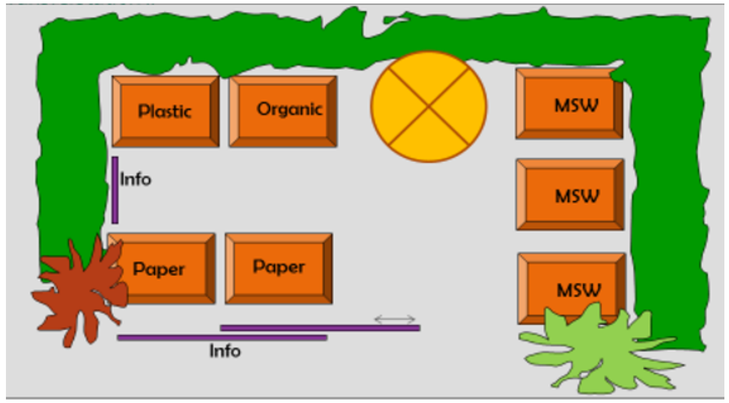
Workpackage 1 : Île de propreté

The Challenge

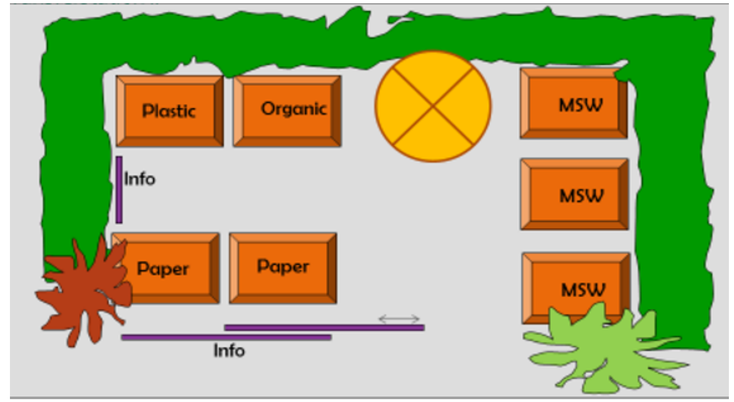
- Friendly people who keep their area clean
- Eagercollectors of recyclables (Barbechas)
- Newly elected administration

Île de propreté – the Idea

Clean City



Île de propreté – the Place



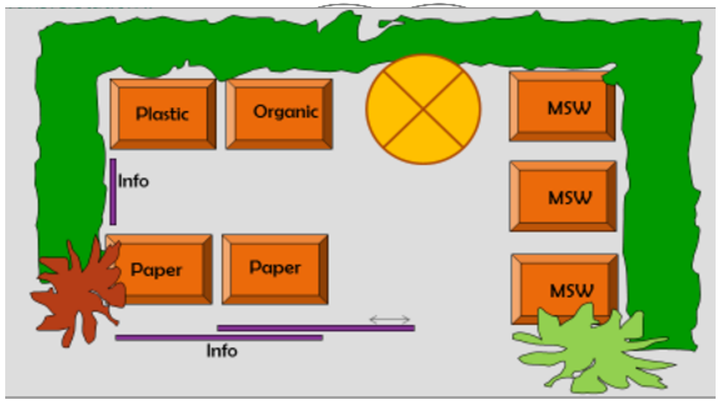
Aim

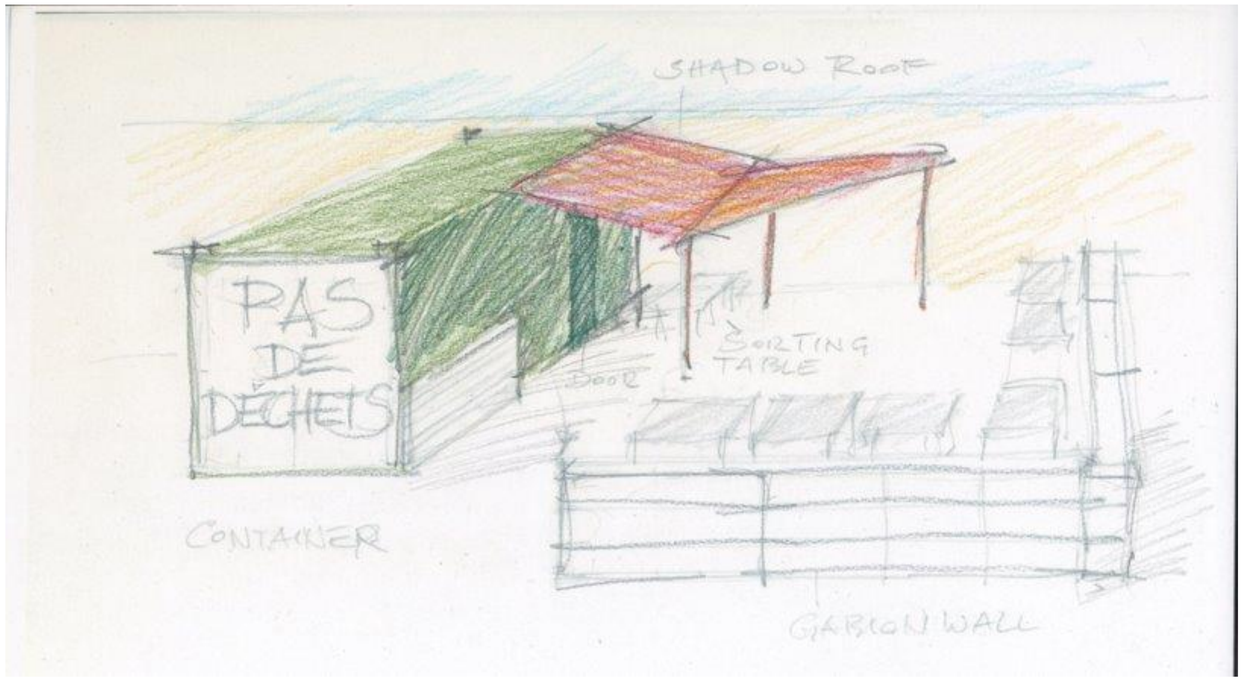
- Place where a new awarenes of waste and valuables can be established
- Center for collecting will become a center for communication
- Low cost but fascinating area

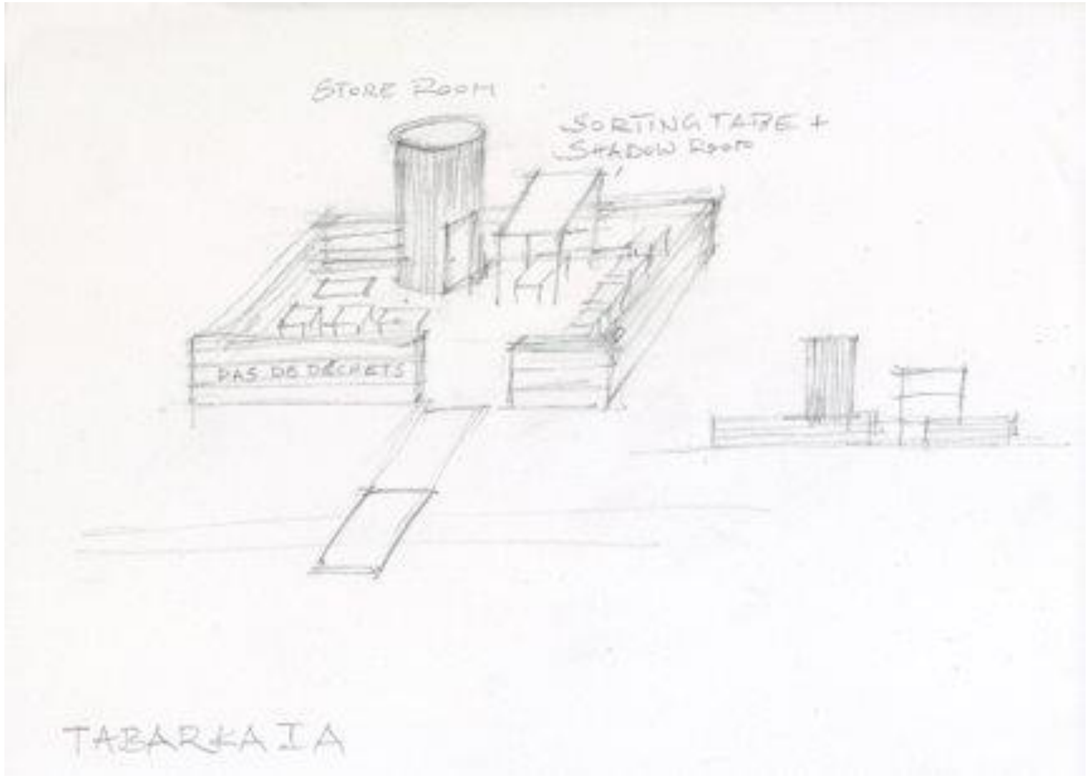
Materials

- Used and old material for a new idea
- A storage for valuables,
- Old wood and metal

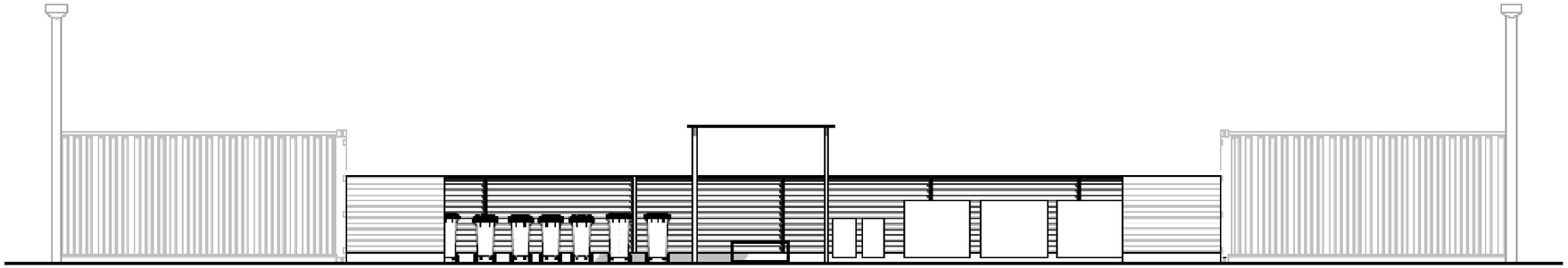
Île de propreté – the Design first ideas







Île de propreté – Design Siliana 1



view A-A
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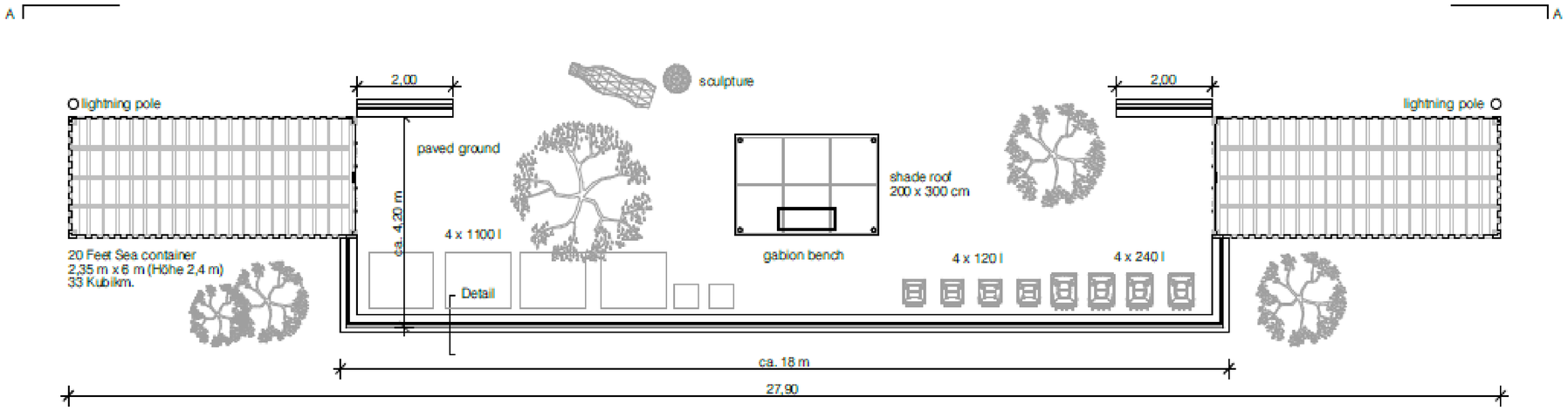


Site plan
1:100

Île de propreté – the Logo

The process to develop a Logo / a Sign is very complicated

- Who is involved?
- Should it be for one City or for Tunesia?

Île de propreté – Barbéchas tasks

- Keeps the spot and surrounding clean
- Informs the inhabitants regarding waste sorting and collection
- Ensures that the goods are picked up regularly
- Collects information about the catchment area of the spot and the waste composition
- Keeps contact with the contact person of the municipality

Île de propreté – Inauguration

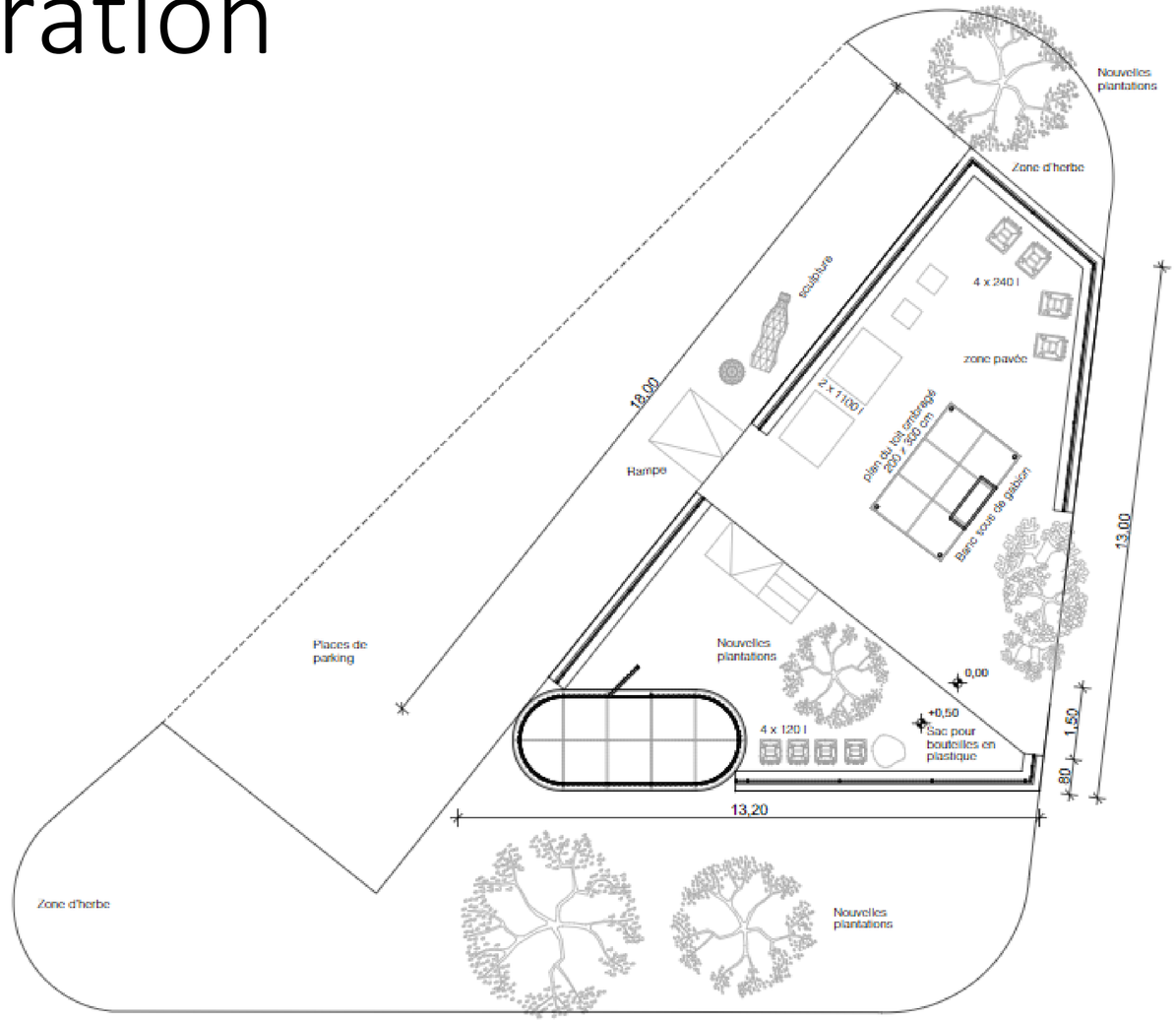
Île de propreté – Realization

Île de propreté – Inauguration

Ile de propreté – People in Siliana

Île de propreté – People in Siliana

Île de propreté – Tabarka 1 in Preparation



plan du site
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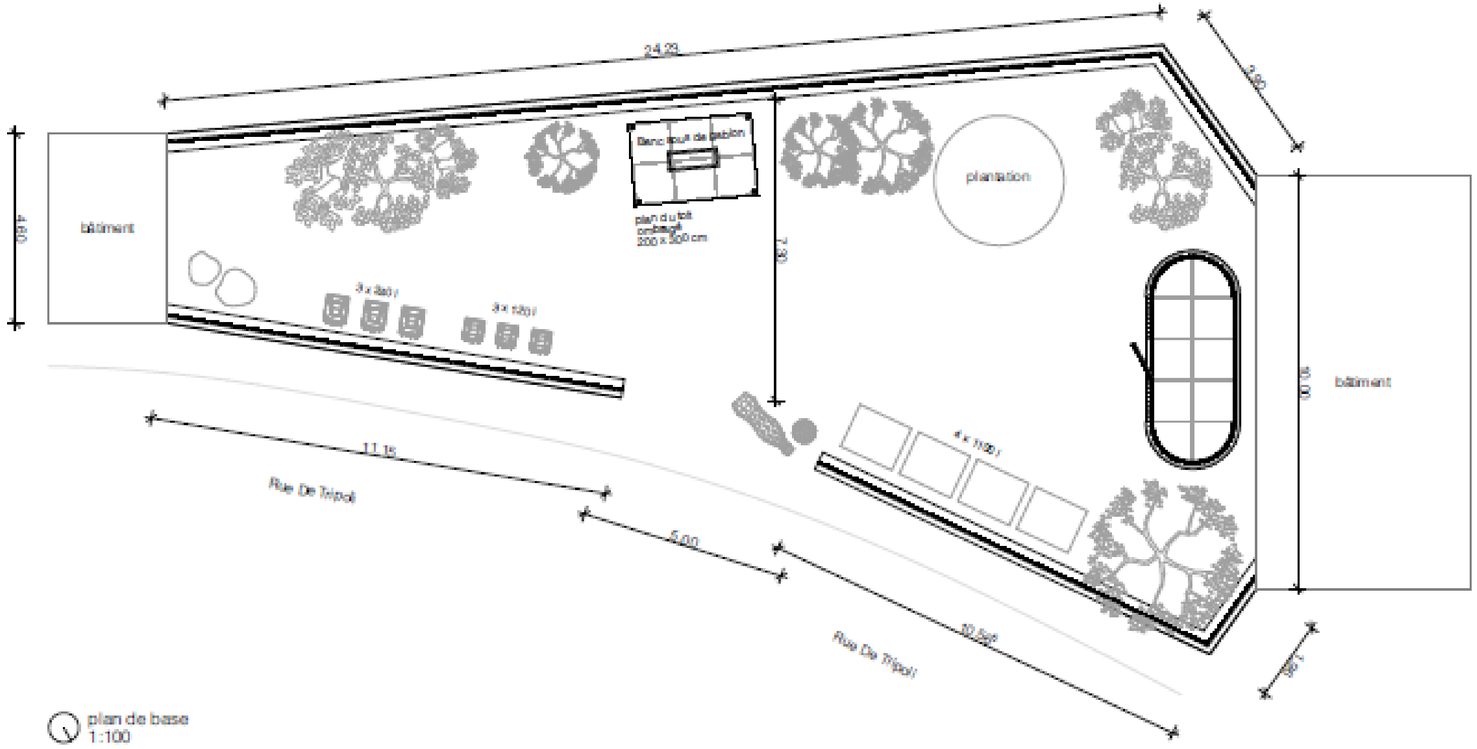
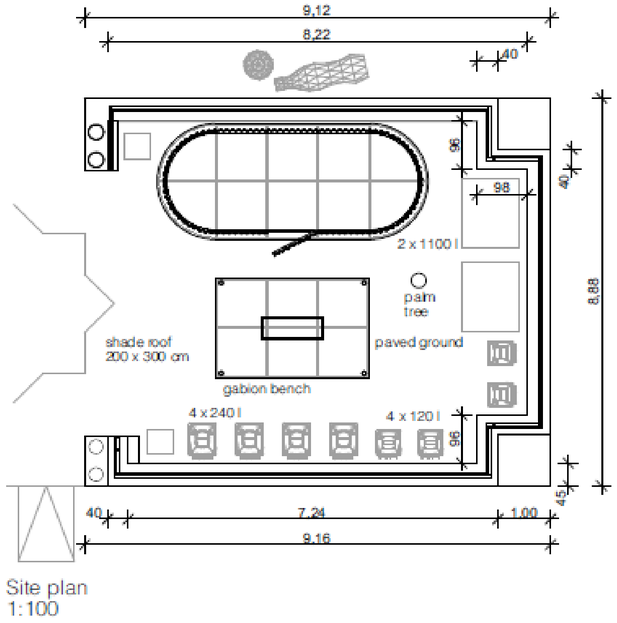
Île de propreté – Douar Hicher 1 in Preparation



All Design: Markus Heinsdorff for WtERT Germany GmbH

Île de propreté –Siliana 2 Phase 3

Marché Municipal



Site plan
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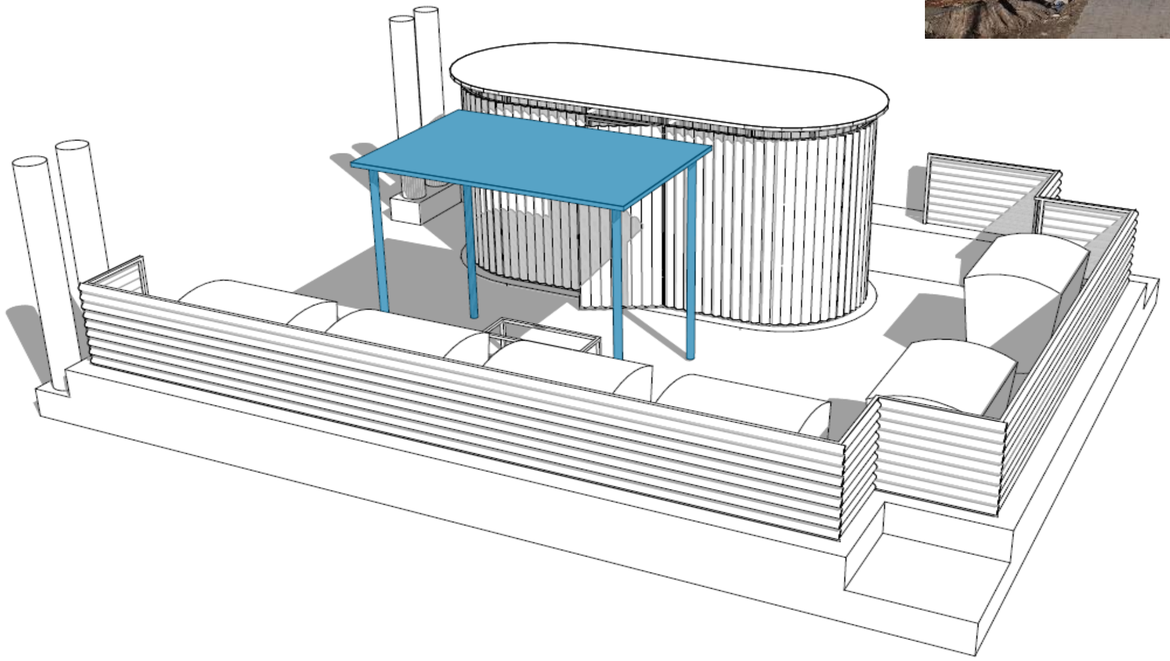

Werner Bauer: bauer@wtert.net

Workpackage 5: Communication

Click for more information:

https://www.wtert.net/Tunisia.html

… and see details from Case Study

… and get contact to experts from the authorities