ECOWEEK
... habits change ... climate change

prishtina 2014
sustainability & green architecture

W1
PARKING LOT, "PRISHTINA START UP"

WORKSHOP TUTORS:

Florina Jerliu
Dukagjin Hasimja
Vlora Navakazi
Arlinda Sheqiri

PARTICIPANTS:

Anila Ferati
Astrit Uka
Genta Deva
Iliriana Sejdullahu
Liridon Ahmeti
Mehmet Rexha
Nertila Kabashaj

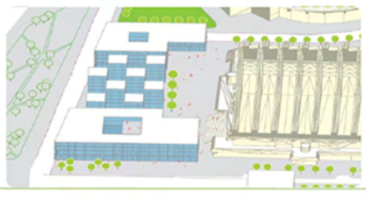
STATEMENT:

We want to regenerate urban spaces in our city through the use of eco design/ sustainability principles

BACKGROUND: "Prishtina-Dynamic City" (2013)

The area behind Sport and Youth Center (previously an abandoned space, converted into a temporary parking lot over five years ago), is identified by the Project "Prishtina-Dynamic City" (2013) as one of vital spaces that can be vitalized by a cluster of a **1) Public Community Center** and **2) Incubators** with work and office spaces, including **3) Collective facilities** (studios) for young entrepreneurs. This proposal generates from a concept that identifies **Knowledge and Education as key factors for Prishtina future development**, and promotes three building typologies which are new in the city.

PRISHTINA DYNAMIC CITY concept has put the Focus On Education And Knowledge is Key For The Future Prospects Of Prishtina.



THREE NEW TYPOLOGIES WERE INTRODUCED IN THE "PRISHTINA DYNAMIC CITY" CONCEPT:

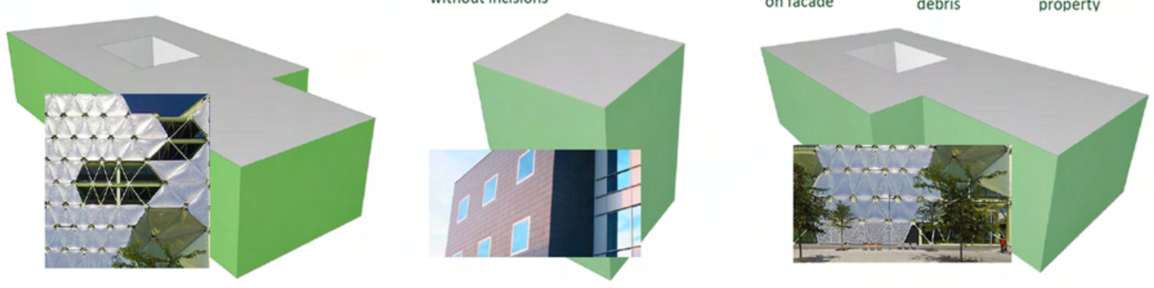
CONCEPT: "Prishtina Start Up" (Eco Week 2014)

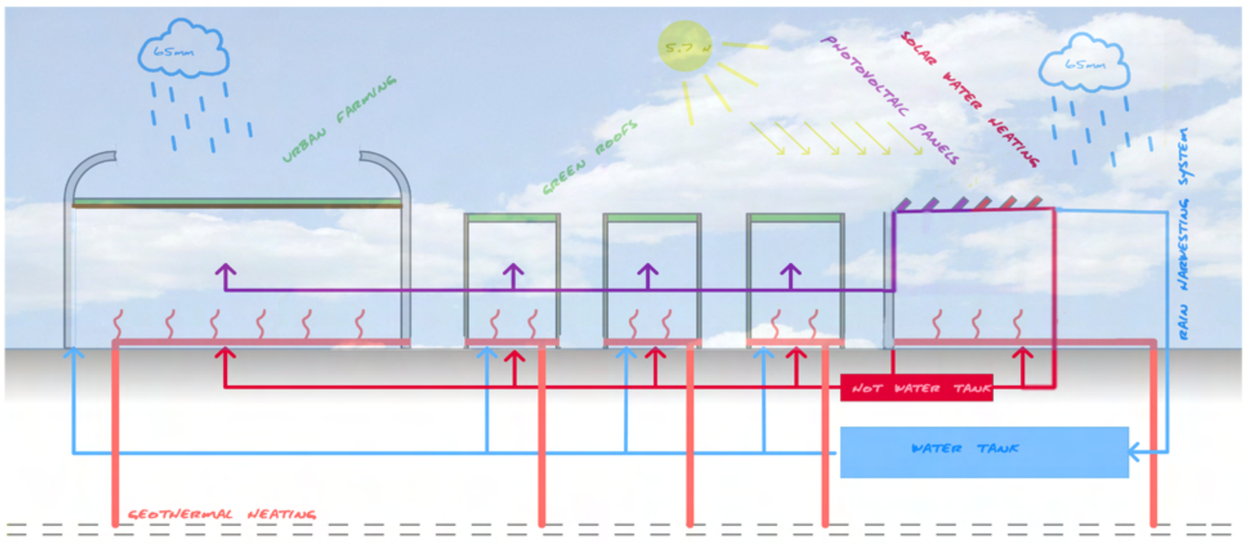
We took it from here! The **"Prishtina Start Up"** could be developed through, and therefore promote, **the use of eco design/ sustainability principles.**

1) **Façade: structural 'Media tic' & 'Ventilated' façade**

'Media tic' is made of recyclable materials and has the ultra violet value of 85%. It is equipped with a sensor that localizes overheating and releases nitrogen cloud that reduces the temperature, and protects the building from insulation and heating; it creates shades and a perfect working environment. It is a very inventive façade with endless possibilities for combination of geometric forms.

We redesigned the façade of two public buildings (Public Community Center, and Business Incubator with 'Media tic', while for the Collective facilities, we explored the Ventilated façade. The second one promotes thermal balance by reducing energy requirement to a minimum and guarantees considerably better appearance and performance standards than in the case of traditional building materials. We choose to use ventilated facade because, this type of facade enables "dry" installation of the covering elements and a wide range of design possibilities of the porcelain tiles' façade.

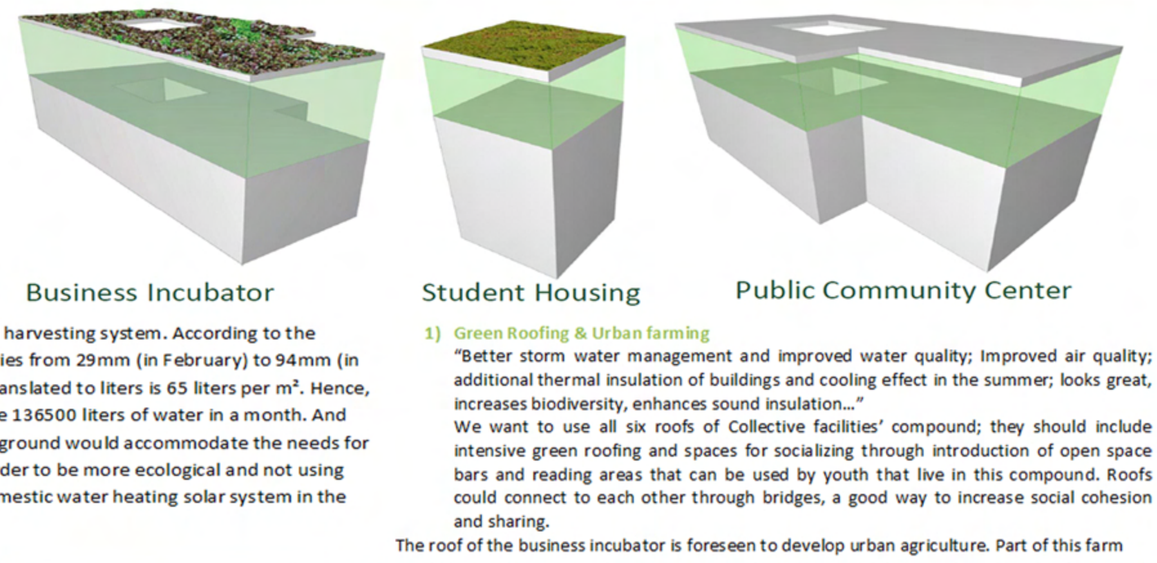




1) **Renewables**

For our buildings to be self sufficient we have planned to incorporate several renewable energy sources aiming at interaction among three building typologies, by helping each other to sustain. We planned to use Photovoltaic (PV) cells to produce electricity. After the researches we concluded that 16 Kw/h is needed for our entire facility. So we are thinking to build a 20 kw/h Solar system in the roof of our Public Community Centre. For that, we will need 140 m² area of 2000 m² total area of the roof building. We have an example of a village in Germany that produces 321% more energy than it is needs, all this thanks to Photovoltaic cells and wind turbines. We have an average of 5.7 hours of insulation in a day (2080.5 h/year), which is more hours of sun than Germany ... Why not use that?!

We also researched, hence, proposed to install a rain harvesting system. According to the statistics the average monthly rainfall in Prishtina varies from 29mm (in February) to 94mm (in September) and the annual average is 65mm. That translated to liters is 65 liters per m². Hence, for our roof area approximately 2100 m2 we will have 136500 liters of water in a month. And we think that installing a 10000 liters tank under the ground would accommodate the needs for technical water for all buildings in the complex. In order to be more ecological and not using energy in the wrong way we plan also to mount a domestic water heating solar system in the roof.



1) **Green Roofing & Urban farming**

"Better storm water management and improved water quality; Improved air quality; additional thermal insulation of buildings and cooling effect in the summer; looks great, increases biodiversity, enhances sound insulation..."

We want to use all six roofs of Collective facilities' compound; they should include intensive green roofing and spaces for socializing through introduction of open space bars and reading areas that can be used by youth that live in this compound. Roofs could connect to each other through bridges, a good way to increase social cohesion and sharing.

The roof of the business incubator is foreseen to develop urban agriculture. Part of this farm would be used to grow and promote eco products in parts of the complex where food is served, while the other part of the roof would accommodate the needs for experimenting in the business of agriculture by the incubating entrepreneurships which are accommodated inside the building. Our urban farm is rentable throughout the year; it will be covered with a 'Media tic' façade structure during the winter, which will provide a dynamic building's envelope for the Business Incubator.

Rockefeller Brothers Fund
Philanthropy for an Interdependent World