

სამოგზაურო კონფერენცია - Travelling Conference SCFuture - “South Caucasus Urban Futures -smart, systemic, resource efficient” in Tbilisi (May 9 to 12, 2019) / Yerevan (May 14 to 17, 2019).

2019 წლის 9 მაისიდან 12 მაისი ჩათვლით თბილისში შედგა საერთაშორისო პროექტის Travel conferences სამუშაო შეხვედრა კიოლნის ტექნოლოგიური უნივერსიტეტის, სომხეთის არქიტექტურისა და მშენებლობის სახელმწიფო უნივერსიტეტის, ქ.თბილისის მერიის არქიტექტურული სამსახურის, საქართველოს ტექნიკური უნივერსიტეტის არქიტექტურის, ურბანისტიკის და დიზაინის ფაკულტეტის მონაწილეობით.

“სამოგზაური კონფერენციაზე“ სტუ-ს არქიტექტურის, ურბანისტიკის და დიზაინის ფაკულტეტის მიერ მომზადდა ე.წ. „ფოტო ხმა“ - პროექტი „ Sustainable City-Waste Management System, Municipal Card, Mobile Application“; ეს არის ერთობლივი პროექტი რომელზეც მუსაობდა ფაკულტეტის პროფესორ-მასწავლებლები: ნინო იმნაძე, ნინო ჩაჩავა, მარიკა ფოჩხუა; პირველი კურსის დოქტორანტები: გიორგი გაბუნია, ოთარ მჭედლიშვილი, მე-4 კურსის ბაკალავრები: ანდრო ქორთუა და ლევან ძეგველშვილი;



ფოტო ხმის საბოლოო სახე:

SC FutUre - "South Caucasus Urban Futures" Smart, Systemic, Resource Efficient Sustainable City - Waste Management System, Municipal Card, Mobile Application

Professors: Chakhava Nina, Imnadze Nina, Pechkhua Marika, PhD Students: Gabunia Giorgi, Mikhelashvili Daria, Bachelor Students: Dzagalashvili Levan, Korbia Andria

INTRODUCTION
To achieve sustainable urban development, separation of municipal waste is one of the most important directions. This reduces negative impact on the environment in many ways. Besides reducing municipal waste in the landfill, re-usable materials are given a new life, bio gas is generated, service interval of large garbage carrier vehicles and public consciousness are increased.

PROBLEM
"Assessment of Environmental Education in Georgia" has proved, that the most important issue is low level of environmental protection awareness among society, which requires a long-term strategic plan and complex approaches. According to "Report on Municipal Solid Waste Management in Georgia" some of the major problems related to municipal solid waste management are:
Legislative base
Local municipal solid waste management plan
Obsolete equipment
Methods and technologies of collection of municipal solid waste
Statistical inventory of solid municipal waste
Separation / separation of solid domestic waste
Above mentioned issues are considered to be part of the whole system that needs to be addressed separately, but at the same time harmonically addressing the main goal. Hence, following concept is aimed to specify challenges that may lead to changing matters in this system in a more sustainable way.

SOLUTION
As it is necessary to concentrate society around given issue as more as possible and to engage them in the process of municipal waste separation, we created three interconnected projects: "Waste Management System", "Municipal Card" and "Mobile Application" under one umbrella: "Sustainable City".

1 SUSTAINABLE CITY - WASTE MANAGEMENT SYSTEM
Waste separated bins can be placed on the standard 5 on 2.5 meter parking lots and will have receptors for plastic, glass, aluminum, paper, batteries, wet waste and an ash-tray and will be equipped with smart and energy efficient technologies.
• Solar panel and a battery will make them self-sufficient.
• Underground big receivers will increase interval of their replacement.
• Laser beam controlled mechanism will inform center in case of overflowing or to avoid changing empty receptors.
• Multiple operations can be made on a LED display.
• Green roof should make them look more appealing and will add greenery percentage per capacity.
• Dedicated place for information will educate citizens to lessen damage on environment.

2 SUSTAINABLE CITY - MUNICIPAL CARD
The card given opportunity to bring together lots of useful municipal services. In the first stage, cardholders will be able to get points by separating and throwing glass, aluminum and paper into smart bins. In near future points can be also accumulated by planting a tree, intensively greening their balconies and terraces, using public transport while having a car etc.
Cardholder can spend gathered points to pay utility bills, cleaning and illuminating their residential buildings, use them in municipal transport, in various activities arranged by the City Hall etc.

3 SUSTAINABLE CITY - MOBILE APPLICATION
The application allows user to control his municipal waste and obstacles and share its sustainability index on social media, which should become a mark of prestige over time in the integrated multi-layer map. Users can see location of the trash bins, find municipal transport stops and directions from them, find inclusive urban areas, bicycle roads and many more... The application also includes Participatory Urban Design platform, where users will be able to submit new ideas for city governance, evaluate on online planned infrastructure projects, make petitions, which should increase citizens' active involvement in the process of planning sustainable future.

CONCLUSIONS
As a result of the use of these complex approaches, city will get a much more sustainable environment, improved quality of life, new jobs, cleaner streets and urban air, less traffic congestion and increased public consciousness and responsibility – which are in fact the basic, reasons of therapy. Current reality, though progress has done and habits for local reality, is aimed to solve the global problems and therefore, our team believes, that in near future given initiative will be expanded and implemented in many cities around the world.



მზისენერჯის ტექსტი:

INTRODUCTION

To achieve sustainable urban development, separation of municipal waste is one of the most important directions. This reduces negative impact on the environment in many ways. Besides reducing municipal waste in the landfill, re-usable materials are given a new life, bio gas is generated, service interval of large garbage carrier vehicles and public consciousness are increased.

PROBLEM

“Assessment of Environmental Education in Georgia” has proved, that the most important issue is low level of environmental protection awareness among society, which requires a long-term strategic plan and complex approaches.

According to “Report on Municipal Solid Waste Management in Georgia” some of the major problems related to municipal solid waste management are:

- Legislative base;
- Local municipal solid waste management plan;

Obsolete equipment;

Methods and technologies of collection of municipal solid waste;

Statistical inventory of solid municipal waste;

Segregation / separation of solid domestic waste.

Above mentioned issues are considered to be part of the whole system that needs to be elaborated separately, but at the same time harmonically addressing the main goal. Hence, following concept is answer to specific challenges that may lead to changing matters in this system in a more sustainable way.

Yes, it is good that in 2019 Tbilisi City Hall has already started installing separated garbage bins, but as surveys has identified, a large part of the population rarely uses them. Given reality motivated us as an urbanists and architects to find our ways of creating more sustainable future.

SOLUTION

As it is necessary to concentrate society around given issue as more as possible and to engage them in the process of municipal waste separation, we created three interconnected projects: “Waste Management System”; “Municipal Card” and “Mobile Application” under one umbrella: “Sustainable City”.

Sustainable City - Waste Management System

Waste separated bins can be placed on the standard 5 on 2.5-meter parking lots and will have reservoirs for plastic, glass, aluminum, paper, batteries, pet waste and an ash-tray and will be equipped with smart and energy efficient technologies:

- Solar panel and a battery will make them self-sufficient;
- Underground big reservoirs will increase interval of their replacement;
- Laser beam-controlled mechanism will inform center in case of overfilling or to avoid changing empty reservoirs;
- Multiple operations can be made on a LED display;
- Grass roof should make them look more appealing and will add greenery percentage per-capita;
- Dedicated place for information will educate citizens to lessen damage on environment.

Sustainable City - Municipal Card

The card gives opportunity to bring together lots of useful municipal services. In the first stage, cardholders will be able to get points by separating and throwing glass, aluminum and paper into smart bins. In near future points can be also accumulated by planting a tree, intensively greening their balconies and terraces, using public transport while having a car and etc.

Cardholder can spend gathered points to pay utility bills, cleaning and illuminating their residential buildings, use them in municipal transport, in various activities arranged by the City Hall and etc.

Sustainable City - Mobile Application

The application allows user to control its municipal waste and statistics and share its sustainability index on social media, which should become a mark of prestige over time. In the integrated multi-layer map, users can see locations of the trash bins, find municipal transport stops and directions from there, find inclusive urban areas, bicycle roads and many more... The application also includes Participatory Urban Design platform, where users will be able to initiate new ideas for city governance, evaluate or criticize planned infrastructure projects, create petitions which should increase citizens' active involvement in the process of planning sustainable future.

CONCLUSIONS

As a result of the use of these complex approaches, city will get a much more sustainable environment, improved quality of life, new jobs, cleaner streets and urban air, less traffic conjunctions and increased public consciousness and responsibility – which are in fact the issues, majority of thematic surveys indicate.

Even though project was done and tailored for local reality, it serves to solve the global problem and therefore, our team believes, that in near future given initiative will be exported and implemented in many cities around the world.

შეხვედრა მოიცავდა თბილისის პრობლემატური უბნების ანალიზს მიკრო, მეზო და მაკრო დონეებზე. კომპლექსური ანალიზის საფუძველზე განხილული იყო ელიავას ბაზრობის არსებული მდგომარეობა, მისი მომავალი განვითარების შესაძლო მიმართულებები, ცენტრალურ სარეკრეაციო სისტემასთან თანხვედრისა და თანამონაწილეობის პოტენციალი.

კონფერენციის მუშაობის ფორმატი:

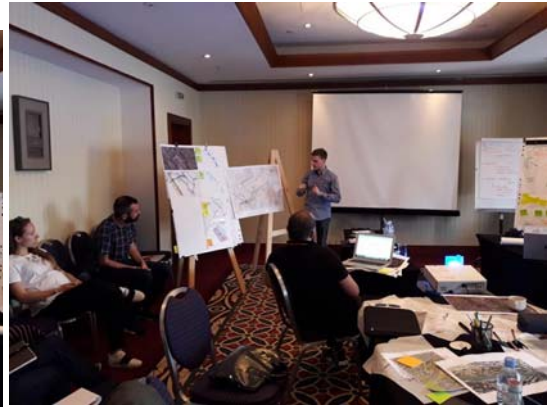
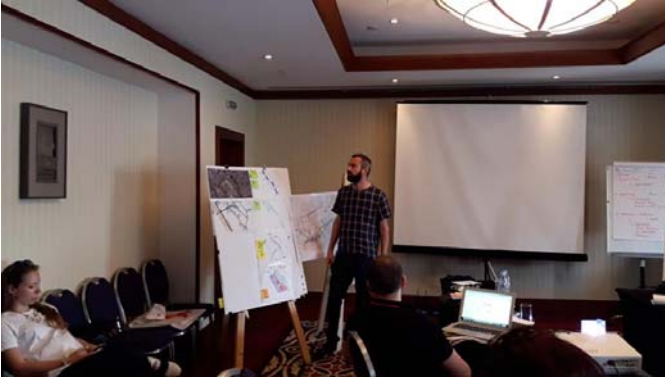
1. დღე - პოსტერების დათვალიერება და პროექტების პრეზენტაცია. დღის მეორე ნახევარში ვიზიტი საკვლევ ტერიტორიაზე.

მე2 დღე - მუშაობა ჯგუფებში

მე-3 დღე - ელიავას ბაზრობის კომპლექსური ანალიზი

მე-4 დღე - შედეგზე ორიენტირებული სამუშაოს ორგანიზება, მულტიფუნქციური გუნდისა და კავშირების ორგანიზება და ფინანსების მოძიების მიმართულებები, საქართველოში არსებული დონორი ორგანიზაციების წარდგენა.





გარდა ამისა სტუმრებმა დავათვალიერეს საქართველოს ბანკის შენობა, ძველი თბილისის უბნები, შეხვდნენ თიმ არქიტექტს არქიტექტურული კომპანიის ჯგუფი.

შეხვედრისას დაიგეგმა მომავალი თანამშრომლობის მიმართულებები - გაცვლითი პროგრამები, ერთობლივი ვორქშოპები, საზაფხულო სკოლები და კურიკულუმები.

სამოგზაურო კონფერენცია გაგრძელდა ერევანში. სადაც მონაწილეობა მიიღეს სტუ-ს არქიტექტურის, ურბანისტიკის და დიზაინის ფაკულტეტის პირველი კურსის დოქტორანტებმა: გიორგი გაბუნიაშვილი და ოთარ მჭედლიშვილი. ერევანში გაიმართა ვორქშოფი თემაზე კულტურული მემკვიდრეობა და მისი თანამედროვე მდგომარეობა: პრობლემები და გამოწვევები. ვორქშოფის დასრულების შემდეგ მათ გადევნათ სერთიფიკატები.



ქ. ერევანში ჩატარებული ვორქშოფის ამსახველი ფოტო მასალა:



მეტი ინფორმაცია შეგიძლიათ იხილოთ სოციალურ ქსელში:

<https://www.facebook.com/groups/2140213462727593/>