



european post-carbon  
cities of tomorrow



# Istanbul Strategy Paper

14 OCTOBER 2016



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no. 613286.

Tüzin BAYCAN, ITU

Aysun AYGÜN, ITU

Project coordination provided by Ecologic Institute.

Manuscript completed in June 2016.

This document is available on the internet at: <http://pocacito.eu/>

<b>Document title</b>	Collated Strategy Paper
<b>Work Package</b>	7
<b>Document Type</b>	Deliverable 7.2
<b>Date</b>	October 2016
<b>Document Status</b>	Final version

## **ACKNOWLEDGEMENT & DISCLAIMER**

The research leading to these results has received funding from the European Union FP7 SSH.2013.7.1-1: Post-carbon cities in Europe: A long-term outlook, under the grant agreement n°613286.

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# STRATEGY PAPER OF ISTANBUL TOWARDS A POST-CARBON CITY

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ITU, Istanbul, June 2016

Tüzin BAYCAN, ITU and Aysun AYGÜN, ITU

## CHALLENGES FACING THE CITY

Istanbul's population has reached 13 million and continues to grow rapidly. The increase in urban population causes the city to sprawl towards peripheries, enlarging the settled and built area. This situation brings some problems such as stress on natural protection areas and forests, long travel time in traffic, air and environment pollution. Population increase is the primary challenge for Istanbul.

Over-migration causes transportation, infrastructure, housing, risk management problems. The migration problem should be solved by strengthening the local administration, implementing the national strategies and limiting the migration to Istanbul.

The system for data collection and publishing is a challenge for Turkey to be developed.

Environmental consideration is a new issue for Istanbul, which should have been more of a priority for decision-makers. The impact of urban and economic development on the environment is not considered. While encouraging economic investments, environmental aspects are underestimated. The economic potential of Istanbul should be used in a more sustainable way. New solutions should be created to decrease unemployment and poverty, while protecting the environment.

Istanbul has improving trends on social performance, while unemployment and poverty levels are decreasing. The education level is increasing and urban life expectancy is higher than Turkey's national average.

Economic performance data indicate that the level of wealth is increasing in Istanbul. As the economic centre the city attracts investment, enterprises, and cooperation and thus has a dynamic and developing economic structure. Its geographic location is an advantage in this economic development.

## INSIGHTS FROM THE GAP ANALYSIS FOR THE CITY

Istanbul is in the initial stage of post-carbon city development. It has many challenges and advantages to organise a more sustainable and post-carbon city. Istanbul's geographical location, economic attraction, natural values, historical and cultural heritage, tourist attractiveness are the main advantages. On the other hand, population increase, immigration, urban sprawl and the pressure on natural areas are the major challenges of the city. Development and protection

measures should be considered in a sustainable way and regulations should be made by local and national governments for the social, economic and environmental viability of the city.

## A STAKEHOLDER VISION FOR THE CITY

The post-carbon vision for Istanbul is for a city that is able to compete on a global level, is dynamic, innovative, self-sufficient, and sustainable, with a high life quality and good governance.

The critical sectors are therefore; quality of life, governance, environment and natural resources, energy, global competitiveness.

## ACHIEVING THE VISION

MILESTONE	STRATEGY TOWARDS MILESTONE
ENERGY: Developing an energy master plan, increasing renewable energy resources and integrating them to the daily life <b>(2020)</b>	<ul style="list-style-type: none"> <li>Sharing system for information and experiences</li> <li>Open-source data base</li> <li>Determining realistic targets about energy efficiency and renewable energy</li> <li>Determining the potential of renewable energy for Istanbul and updating regularly</li> <li>Adaptation of development plan to energy master plan</li> <li>Determining critical sectors and their related institutions on energy</li> <li>Revealing the current situation with respect to different sectors and identifying gaps</li> <li>Sustaining coordination of institutions that are assigned to prepare energy master plan</li> <li>Legislative arrangement for energy</li> <li>Providing sustainability of energy policies and implementation decisions</li> </ul>
ENERGY: Determining of action plans and targets for energy master plan, developing framework for legal governmental regulations <b>(2025)</b>	<ul style="list-style-type: none"> <li>Increasing local government's authority</li> <li>Increasing R&amp;D that has implementation area</li> <li>Determining standards, definitions and terms about energy and efficiency</li> <li>Determining legal aspects of institutions that are related to defined incentive areas</li> <li>Management of incentives in terms of sectors</li> <li>Arrangement of legislation in order to enable energy strategies implementation</li> </ul>

<p>GOVERNANCE: Generating sustainable urban inventory and city information system and sharing to public (social, economic, environmental data) <b>(2020)</b></p>	<p>Preventing confusion of authorisation between institutions Sustaining collaboration between institutions Surveillance of organisation Generating a common data base Generating a monitoring system for city activities</p>
<p>QUALITY OF LIFE: Generating urban standards considering the identity of the city <b>(2020)</b></p>	<p>Generating identity of the city that is compatible with nature and sustainable Increasing the sense of urbanity</p>
<p>QUALITY OF LIFE: Planning for accessible city <b>(2020)</b></p>	<p>Developing transportation plan that focuses on human Determining areas that have traffic and accessibility problems, generating specific solutions and legislations for those areas Solving parking problem Giving priority to transportation projects (public transportation, railway systems) Integration of public transportation modes Considering disadvantageous groups while planning Increasing public spaces</p>
<p>QUALITY OF LIFE: Monitoring system for quality of life <b>(2020)</b></p>	<p>Monitoring life quality for Istanbul Increasing social facilities that service to all citizens</p>
<p>QUALITY OF LIFE: Increasing urban economy and welfare <b>(2040)</b></p>	<p>Increasing high value added production Generating standards for infrastructure and construction</p>
<p>ENVIRONMENT AND NATURAL RESOURCES: Consensus of stakeholders on valuable natural resources <b>(2025)</b></p>	<p>Determining the existing natural resources Including EU environmental programs to scale development plan as a national policy Encourage innovative and sustainable technology for construction sector Develop effective control and protection mechanisms Redevelop legislation and standards Effective waste management Recovery of lost natural resources in developed</p>

	<p>urban areas</p> <p>Making those who harm nature pay for damages</p> <p>Increasing awareness of nature</p> <p>Encouraging projects and activities that are sensitive to nature</p> <p>Preventing overlapping attributions of institutions on the management of natural areas</p> <p>Create a monitoring system for natural resources</p> <p>Develop long-term plans</p> <p>Make regional development plans comply with environmental plans</p> <p>Generate specific and local standards for Istanbul</p>
<p>GLOBAL COMPETITIVENESS: Preparing economic vision plan (2020)</p>	<p>Make staging for long-term and comprehensive development plan based on time and space</p> <p>Protect standards of urban values and develop them (history, culture, quality of service sector, environment, tourism)</p> <p>Use tools that would create brand value within a common decision mechanism</p> <p>Sustain security environment that would attract investors</p> <p>Educate qualified labour for encouraging sectors</p> <p>Increase competitiveness of Istanbul between liveable global cities</p> <p>Create science and art identity for Istanbul</p> <p>Determine competitive sectors for Istanbul's future</p> <p>Define pioneer sectors and institutions that shapes Istanbul's economic structure</p> <p>Define economic vision of Istanbul and its components</p> <p>Develop economic vision in cooperation with related institutions</p>

## ASSESSMENT OF NEEDS

LOCAL GOVERNMENT
<p>Include women in local government decision process and projects</p> <p>Consider different social groups while distribution of resources</p> <p>Develop local project using pilot projects</p> <p>Develop common database (open source and available), master plans and promoting sustainable coordination</p> <p>Create common language on terms</p> <p>Coordinate implementation stages in cooperation with investors</p> <p>Transparency</p> <p>Create a platform bridging local and national government</p> <p>Increase local government - universities collaboration, using EU funds for applicable projects</p> <p>Manage finance and resources, activating implementations</p>
NATIONAL GOVERNMENT
<p>Incentive policies for green technologies</p> <p>Determine the frame for institutions' roles and their collaboration</p> <p>Generate local administrative standards that are flexible enough for the uniqueness of local values</p> <p>Establish effective institutions working on technological adaptation</p> <p>Prepare legislative and administrative framework for energy-efficient projects</p> <p>Control mechanism for local governments</p> <p>Transparency for investments and projects in urban scale</p> <p>Collaboration with local stakeholders</p> <p>Give priority to national interest for EU collaborations</p> <p>Implement pilot projects first for the new projects and consult academics</p> <p>Consider local authorities experiences and knowledge while preparing legislation and standards</p> <p>Develop economic models and financial resources</p> <p>Coordinate institutions</p>
EU
<p>Encourage developing countries to work on energy-efficient issues</p> <p>Have country-specific approach for different countries, their problems and standards</p>

## ANNEX. STAKEHOLDERS: ISTANBUL

### WORKSHOP 1

Institution	Name and Surname
ITU	Prof. Dr. Zerrin YILMAZ
ITU	Ass. Prof. Hatice SÖZER
Istanbul Metropolitan Municipality, Environmental Protection Dept.	Seda ÖZDEMİR
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Ayşe GÖKBAYRAK
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Hilal ÜNDÜL
Istanbul Metropolitan Municipality, Urban Renewal Dept.	İpek GÜRSES
Istanbul Metropolitan Municipality, Transportation Planning Dept.	Hakan AKÇA
İstanbul Water and Sewage Administration	Gökhan CİNGÖZ
İstanbul Water and Sewage Administration	Şeyma CİNGÖZ
İstanbul Water and Sewage Administration	İhsan Mustafa DOĞAN
İstanbul Water and Sewage Administration	Erhan KAYAOĞLU
İstanbul Water and Sewage Administration	Onur MOR
Housing Development Administration	Sıdıka LÖK
Housing Development Administration	Timuçin KURT
Istanbul Metropolitan Planning Office	Ulaş AKIN
EY Climate Change and Sustainable Services in Turkey	Eren ÖZDEN
İstanbul Chamber of Commerce	İrem YILMAZ
İstanbul Development Agency	Nesrin BEDELOĞLU

### WORKSHOP2

Institution	Name and Surname
Istanbul Metropolitan Municipality, Environmental Protection Dept.	Seda ÖZDEMİR
Istanbul Metropolitan Planning Office	Ulaş AKIN
Istanbul Water and Sewage Administration	İhsan Mustafa DOĞAN
Istanbul Metropolitan Municipality, Transportation Planning Dept.	Hakan AKÇA
Istanbul Development Agency	Nesrin BEDELOĞLU
Istanbul Chamber of Commerce	Büşra Çatalbaş Gül
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Aylin ÖZDENİZ
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Melihat BİÇEN
Housing Development Administration	Timuçin KURT
Housing Development Administration	Sıdıka Lök



**WORKSHOP 3**

<b>Institution</b>	<b>Name and Surname</b>
ITU	Ass. Prof. Hatice SÖZER
Istanbul Metropolitan Municipality, Environmental Protection Dept.	Seda ÖZDEMİR
Istanbul Chamber of Commerce	İrem YILMAZ
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Ayşe GÖKBAYRAK
Istanbul Water and Sewage Administration	İhsan Mustafa DOĞAN
Housing Development Administration	Timuçin KURT
Istanbul Metropolitan Municipality, Urban Renewal Dept.	Hilal ÜNDÜL
Istanbul Metropolitan Municipality, Urban Renewal Dept.	İpek GÜRSES
ITU	Göktuğ KÖSEAHMET
Housing Development Administration	Nigar EYİT