



## Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

# Eskisehir Urban Development Project

Award Scheme

Guangzhou Award

Sustainable Development Goals

Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

## Summary

Eskisehir Metropolitan Municipality started Eskisehir Urban Development Project to provide healthy, reliable and accessible urban areas for people in 2002. This project includes Eskisehir Tram System Project (Component 1) and Eskisehir Porsuk River Rehabilitation Project (Component 2).

## Background and Objective

Component 1 has 39 km of tram lines and 33 vehicles in the city center. With tram system project, the culture of sustainable urban mobility was disseminated and a green and comfortable transportation was provided in Eskisehir. In the scope of Component 2, 13 km of Porsuk River bed was rehabilitated and 9.5 km of irrigation canal was renewed. This rehabilitation project provided to prevent flooding damages, clean the river and improve the level of sanitation. With this project, old pedestrian and car bridges were renewed and new ones were established. Also, one 250.924 m<sup>2</sup> and another 255.897 m<sup>2</sup> large scaled green parks, with thousands of green plants, were built. BACKGROUND INFORMATION Eskisehir Urban Development Project is implemented by Eskisehir Metropolitan Municipality with funding from European Investment Bank (EIB). The payment back started 5 years following the end of the project and will continue for 20 years. ORIGINS Eskisehir is a city with a rapidly expanding population because of its socio-economic, cultural, educational and environmental aspects. This increase over the years has brought with it an excessive presence of cars and other vehicles and so a growing urban traffic congestion, air and noise pollution. Therefore, it became essential to revise transportation politics. Eskisehir is a city which settled and grown on two banks on Porsuk River. However, Porsuk River, which is the life blood of the city, transformed into a garbage and sewage canal owing to discharged industrial and household waste in time. Pollution in the Porsuk River threatened directly the aquatic ecosystem to such an extent that no living organisms were encountered in the river. As a result, recovering its physical condition became inevitable. The target groups of this project are: Residents of Eskisehir, which has a population of almost 861,000 Visitorsto Eskisehir Some public institutions Component 1 of Eskisehir Urban Development Project aimed to provide sustainable and people oriented transportation service to shorten the time spent for transportation in the city, to improve the comfort in urban transportation, to reduce the risk resulted from transportation, to increase the transportation choices that citizens have, to decrease the cost of urban transportation to both town and country economy, and to increase accessibility for people. To achieve the goals stated above, it was considered that the public transportation system must have been enhanced by planning a tram system that is integrated with the existing rubber-tyred public transport system and convenient with the city's development plan. Thus Estram, Eskisehir's tram system, was begun to be constructed in August 2002 and put into operation in December 2004. Estram has now 39 km of tram lines and 33 vehicles in the city center. The new additional 16 km of tram line is under construction to the new city hospital and some suburbs of Eskisehir and it will be completed at the end of 2018. Procurement of 14 new additional trams has been done in 2018. Component 2 of Eskisehir Urban Development Project aimed to prevent earthquake and flooding damages, to clean the river, and to improve the level of sanitation. In the scope of Porsuk River Rehabilitation Project, 13 km of Porsuk River bed was reconstructed and 9.5 km of irrigation canal was renewed. All of the old vehicle and pedestrian bridges over Porsuk River which were determined to be not resistant to possible earthquakes, were reconstructed. New ones were also constructed on key points. Eight water level control structures were constructed on specific points along 13 km. Blanket gabion arrangements were carried out in the Porsuk River bed for the purpose of preventing landslip due to erosion. Necessary landscape arrangements were completed in order to make Porsuk River flow in a green zone. Two large scaled parks, Sazova Science Art and Culture Park and Kentpark, have been built after the implementation of the urban development project. A plant has been constructed in the structure of Eskisehir Metropolitan Municipality for manufacturing the boats and gondolas to be used on Porsuk River. Porsuk River has been started to be used for touristic purposes. This innovation does not involve any partnership. It is implemented by Eskisehir Metropolitan Municipality via many domestic and foreign companies bidders for both consultancy and construction. Eskisehir Urban Development Project is implemented by Eskisehir Metropolitan Municipality with funding from European Investment Bank (EIB). Cost of Component 1 is USD 121,000,000 while the cost of Component 2 is EUR 38,000,000 . Fifty percent of cost of these two components is financed by EIB. The payment back is planned to start 5 years following the end of the project and will continue for 20 years. INNOVATIVE ASPECTS Eskisehir Urban Development Project can be considered revolutionary. Eskisehir is one of the few cities that use tram system in Turkey. Also Porsuk River Rehabilitation Project is among the best examples of this type of projects. Eskisehir Urban Development Project has provided such positive impacts that it has become immediately the center of interest for many municipalities from abroad and within Turkey itself. Both Tram System Project and Porsuk River Rehabilitation Project have been investigated on site by other municipalities and gained their appreciation. Eskisehir Tram System Project (Estram) and Porsuk River Rehabilitation Project received 'UITP Light Rail World Award' in 2004 and 'Great Environment Award' in 2016, respectively. Before this project, similar works completed in other Modern Europe Countries were examined on site by a determined technical team and the most appropriate one was selected from those which were sustainable for Eskisehir. This project is applied in the area of transportation, environmental management and sustainable development complying with technology. Although Eskisehir Urban



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Development Project has many advantages at medium and long term horizons, it also has some negative impacts during the period of construction. Construction activities has impact on disturbance of local people's daily life. On the other hand, total delay time for private car users has increased with the introduction of tram system in Eskisehir since trams have priority at traffic lights. Thus tram system project has caused dissatisfaction of private car users. Even if this case is a negative impact of project for private car users, it provides a reduction in traffic congestion by directing people to use public transportation and has positive impacts for people with regards to Sustainable Urban Mobility Planning. **DESIRED CHANGE OR OUTCOME** Eskisehir Urban Development Project has economic, social and environmental impacts that make a net positive contribution to the community in general. Tram system with 39 km of tram lines and 33 vehicles has provided a significant reduction in city congestion. It has minimized the rate of traffic accidents, level of air and noise pollution. Furthermore, it has affected environment thereby public health positively in terms of the energy it uses. After the construction of tram system, wide pedestrian zones have been created and so cultural and social life of citizens has been activated and trading has been revived. Also, an easily accessible transport for, in particular, elderly and disabled people has been provided through a low-floor system. In the scope of Porsuk River Rehabilitation Project, 13 km of Porsuk River bed was reconstructed and 9.5 km of irrigation canal was renewed. Porsuk River Rehabilitation Project increased the green areas Eskisehir Urban Development Project has economic, social and environmental impacts that make a net positive contribution to the community in general. 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Number of passengers using tram system is obtained by Eskisehir Tram System (ESTRAM) by ticket sale data. Time that spent for transportation and air quality of the city are determined by Transportation Planning Unit in Eskisehir Metropolitan Municipality using some software packages and emission measurement equipment, respectively. In addition, number of visitors to Eskisehir is another indicator to assess the change. Visitor count is made by museum ticket sale data and number of domestic and international tourist arrivals in hotels. With Eskisehir Urban Development Project, Sustainable Urban Mobility Planning (SUMP) which provides a people-oriented transportation instead of vehicle-oriented transportation is applied for the first time in Turkey. Therefore, the mobility needs of people are satisfied, CO2 emission, pollution and energy consumption are reduced and so the quality of life is increased. Eskisehir Urban Development Project has transformed Eskisehir into a tourism city with increased life quality, people-oriented transportation politics and arrangements made for environment and thus Eskisehir has become a city receiving constant migration. **LEARNING ASPECTS** With the rapid population growth in Eshisehir, it became essential to revise transportation politics and in 2003 Turkey's first transportation master plan was prepared by Istanbul Technical University in Eskisehir. However, with a law effectuated in 2012, service area of the metropolitan municipality was extended to cover the service area of all counties of city and transportation master plan prepared in 2003 became inadequate to meet the growing and developing city's needs. Therefore, in partnership with Eskisehir Metropolitan Municipality, Istanbul Technical University and Eskisehir Osmangazi University, Eskisehir Transportation Master Plan including a tram system project was revised in 2015 as suitable to Sustainable Urban Mobility Planning (SUMP) for the first time in Turkey. Porsuk River Rehabilitation Project is also among the best examples of this type of rehabilitation projects. Because of these reasons, Eskisehir Urban Development Project is the center of interest for many municipalities from abroad and within Turkey itself. They want to take advantage of our experience by investigating both Tram System Project and Porsuk River Rehabilitation Project on site. **RELEVANCE TO SUSTAINABLE DEVELOPMENT GOALS** Goal 3: Ensure healthy lives and promote well-being for all ages Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all Goal 10: Reduce inequality within and among countries Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable Target 2: Access to safe, affordable, accessible and sustainable transport systems for all Target 6: Improve air quality and manage municipal and other wastes Target 7: Universal access to safe, inclusive and accessible green and public spaces, in particular of women, children older persons and persons with disabilities