



# **SOFIA MUNICIPALITY**



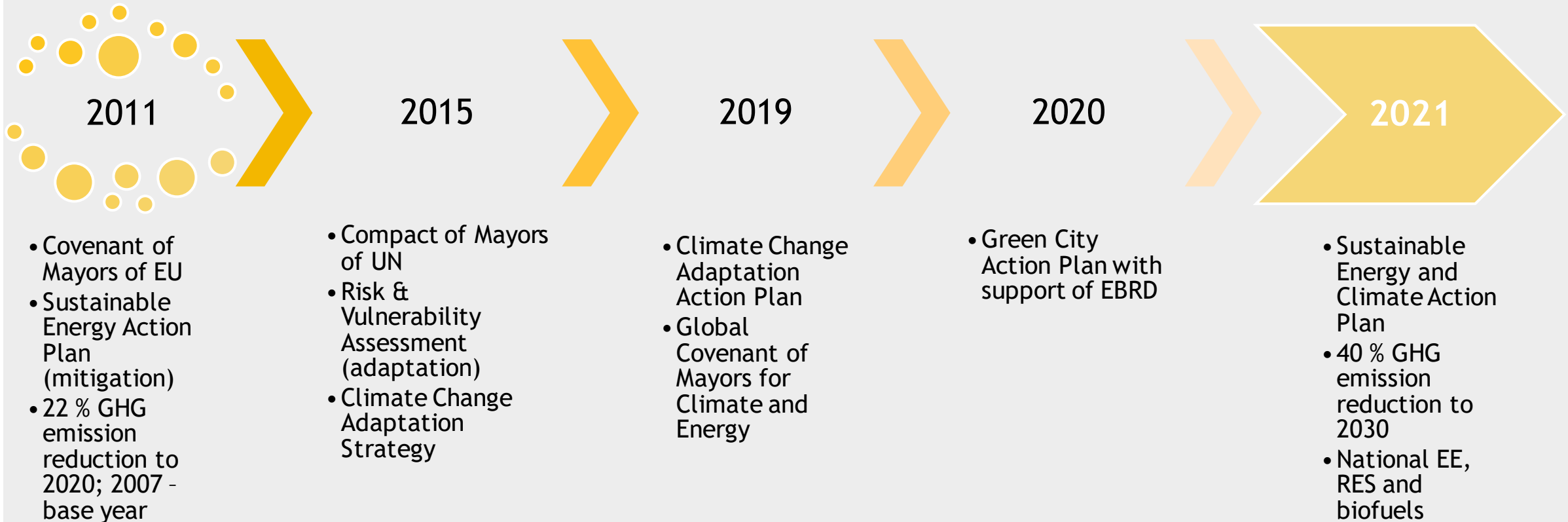
***BALKAN FORUM 2020  
FOR ENTREPRENEURSHIP AND  
INOVATION  
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2020***

# About Sofia Municipality









- Sofia is the capital of Bulgaria
- 24 districts
- More than 1.3 mln. inhabitants
- About 40% of national GDP

# Strategic development



## Main priorities

- Improving Air Quality 
- CO2 Reduction with 40% by 2030 
- Improve energy efficiency within buildings 
- Increase the percentage of renewable energy used 
- Integration of green infrastructure throughout the city  



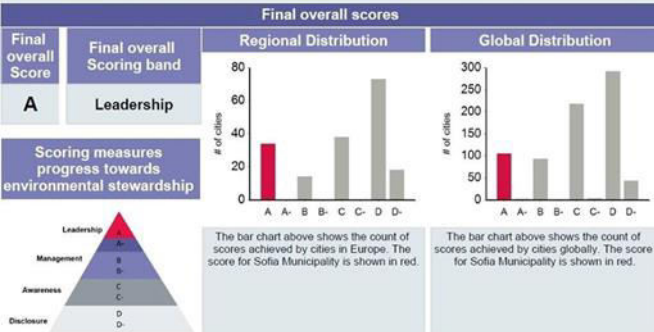
# Recent achievements



**As an A List city we're  
leading by example to  
act on climate change**

## Sofia Municipality CDP Cities 2019

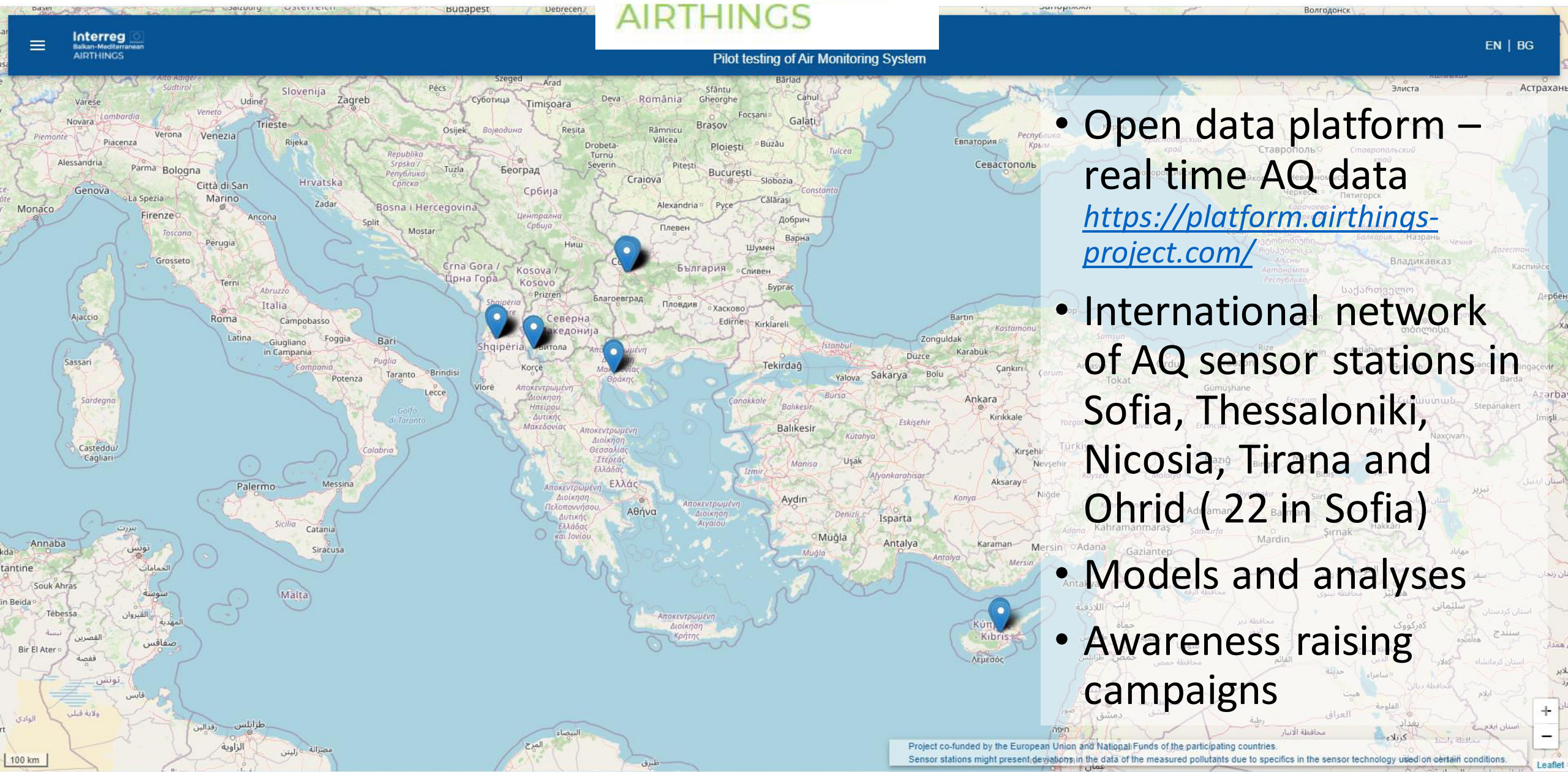
This snapshot report presents the score that Sofia Municipality received for its response to the 2019 questionnaire. CDP uses the scoring methodology to incentivize cities to measure and manage environmental impacts. This report can be used as a tool for gaining an overview of environmental performance and how the city's response can be improved in the future. Responses are scored by CDP and CDP's scoring partner ADEC, using the 2019 CDP Cities Scoring Methodology. Scores are private to cities although CDP will recognize and reward the highest scoring cities.



- A List on the 2019 CDP for demonstrating leadership in transparency, adapting to and preparing for the worsening impacts of the climate crisis.  
<https://www.cdp.net/en/cities/cities-scores>
- 18,2 % CO<sub>2</sub> reduction in 2018 according to 2007 GHG inventory (*achieved 82,7 % of 2020 target*)
- Successful implementation of European projects to improve air quality and mitigate climate change



# AIRTHINGS project



- Open data platform – real time AQ data  
<https://platform.airthings-project.com/>
- International network of AQ sensor stations in Sofia, Thessaloniki, Nicosia, Tirana and Ohrid ( 22 in Sofia)
- Models and analyses
- Awareness raising campaigns

# What is next?



## Green, clean municipality, full of life- Vision

- EBRD Green City Action Implementation
- Total investment volume 840 mln. euro.
- Main benefits – energy savings 384 100 MWh/a; reducing PM<sub>2.5</sub> emissions with 21 200 kg/a, 322 700 kg/a NO<sub>2</sub>, CO<sub>2</sub> savings 213 800 t/a
- Air quality improvement and greenhouse gas emissions reduction.
- Health benefits from improved physical activity and mental wellbeing of Sofia Municipality's residents.
- Ecosystems restoration from restored green spaces, corridors and riverbanks.
- Improved quality of urban space, bringing opportunities for higher land value and tourism growth.
  
- Main challenges
  - ✓ Residential heating. Sofia Municipality has large number of households using solid fuels and low-efficient heating systems, which lead to poor air quality during the winter.
  - ✓ Housing and communities. Sofia Municipality has an advanced solid waste management system with a mechanical and biological treatment plant and production of solid recovered fuel from residual waste. However, waste generation is high and therefore awareness campaigns promoting reduction of material consumption and increase in recycling are required.
  - ✓ Land use and planning. Sofia Municipality has extensive open green space. However, the share of green space in some regions is lower or is not evenly distributed, especially in residential estates in northern city parts.
  - ✓ Green-blue infrastructure. The water supply network needs to be upgraded and not all areas are currently connected to the wastewater sewage network. Expected extreme weather events due to climate changes, such as flash and surface floods will put extra pressure on the water system.
  - ✓ Transport. Sofia Municipality currently has a large share of private vehicles with high emissions, contributing to air pollution. We need to continue enhancing walking and cycling paths in order to encourage more people to undertake active modes of transport.



# What is next?



*Strategic Objectives. The three pillars have one overarching strategic objective and a number of medium –term targets to achieve the objective.*

Green strategic objectives	SO1. Sofia Municipality will achieve visible, tangible improvements to the city's physical environment and preserve biodiversity levels with particular focus on:	SO1.A Improve green spaces throughout the city and increase their share
		SO1.B Integration of green infrastructure throughout the city
		SO1.C Promote transit-oriented development
Clean energy strategic objectives	SO2. Sofia Municipality will improve air quality and reduce its carbon footprint.	SO2.A Increase the share of public transport usage
		SO2.B Promote cleaner vehicles
		SO2.C Improve energy efficiency within buildings
		SO2.D Increase the percentage of renewable energy used and lower use of solid fuels for building heating
Responsible resource use strategic objectives	SO3. Sofia Municipality will improve the surface water management and build resilience to future climate change risks.	SO3.A Reduce dependence on surface water: improve vulnerability during an extended drought
		SO3.B Ensure that the city is resilient to future climate change risks
	SO3. Sofia Municipality will optimize waste collection and treatment and reduce the amount of landfill waste, specifically focusing on:	SO3.C Increase recycling rates
		SO3.D Encourage the reuse of materials



# What is next?



<i>ID</i>	<i>Short-term actions</i>	<i>Strategic Objectives</i>	<i>Implementing body</i>	<i>CAPEX and development costs (EUR – 2019 cost – € '000s)<sup>1</sup></i>	<i>Net changes to annual OPEX (EUR – 2019 cost – € '000s)</i>
<b>Energy</b>					
<b>E.01</b>	Improvement of municipal building energy efficiency programme	SO2.C	Sofia Municipality: “Housing and Public Construction, Heat Energy and Energy Efficiency” Directorate	(74,275)	2,309
<b>E.02</b>	Public lighting renewal	SO2.C	Sofia Municipality: “Transport Infrastructure” Directorate	(178,076)	6,143
<b>E.03</b>	Geothermal energy development	SO2.D	Sofia Municipality: “Territorial Planning” Directorate	(13,101)	(85)
<b>Housing and communities</b>					
<b>H.01</b>	Housing inter-block area improvements	SO1.A, SO1.B	Sofia Municipality: “Territorial Planning” Directorate and “Green System” Directorate	(535)	(431)
<b>H.02</b>	Energy efficiency measures in multifamily residential buildings	SO2.C	Sofia Municipality: Architecture and Urban planning Division, Climate and energy department	(117,014)	14,111
<b>H.03</b>	Community repair and reuse centre buildings	SO3.C, SO3.D	“Waste management” Directorate	(94)	(73)
<b>H.04</b>	Pocket parks in dense residential neighbourhoods	SO1.A, SO1.B	Sofia Municipality: “Territorial Planning” Directorate and “Green System” Directorate	(1,464)	(43)
<b>Urban planning</b>					
<b>U.01</b>	Transit-oriented development	SO1.A, SO1.B, SO1.C, SO2.A	Sofia Municipality: Chief Architect and “Territorial Planning” Directorate	(128)	N/A
<b>U.02</b>	Brownfield regeneration	SO1.A, SO1.B	Sofia Municipality: Chief Architect, “Territorial Planning” Directorate and “Green system” Directorate	(867)	(34,351)
<b>Blue- green infrastructure</b>					

<sup>1</sup> Bracketed numbers are additional expense and the non-bracketed numbers are debit amounts. They are not revenue generation but cost savings.

# What is next?

## Blue- green infrastructure

<b>BG.01</b>	Climate change risk assessment and flood model	SO3.B	Sofia Municipality: “Emergency Help and Prevention” Directorate, “Engineering Infrastructure” Directorate and “Climate, Energy and Air” Directorate, Division Architecture and Urbanization, Sofproekt	(187)	N/A
<b>BG.02</b>	Green corridor protection, enhancement and development	SO1.A, SO1.B, SO3.B	Sofia Municipality: Chief Architect, “Territorial Planning” Directorate and “Green System” Directorate	(32,695)	(24,598)
<b>BG.03</b>	Surface water management	SO3.A, SO3.B	Sofia Municipality: “Emergency Help and Prevention” Directorate, “Engineering Infrastructure” Directorate and “Climate, Energy and Air” Directorate, Division Architecture and Urbanization, Sofproekt	(26,661)	(246)
<b>BG.04</b>	Optimize recycling and waste management in the construction sector	SO3.C, SO3.D	“Waste management” Directorate, Directorate and “Green system” Directorate	(7,758)	8,382

## Transport

<b>T.01</b>	Promote cycling and walking	SO2.A	Sofia Municipality: Chief Architect, “Transport Infrastructure” Directorate and “Territorial Planning” Directorate	(8,969)	N/A
<b>T.02</b>	Tram renewal programme	SO1.C, SO2.A	Sofia Municipality: “Transport” Directorate and “Stolichen Electrotransport” EAD (private commercial company owned by the Municipality)	(340,884)	N/A
<b>T.03</b>	Parking management	SO2.B	Sofia Municipality: “Territorial Planning” Directorate, “Traffic Analysis and Management” Directorate and “Urban Mobility Centre” EAD	(37,689)	(2,568)
<b>T.04</b>	Electric vehicle promotion	SO2.B	Sofia Municipality: “Transport Infrastructure” Directorate	(150)	N/A

# Thank you for your attention!



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