



# Bucharest, soon-to-be a Smart Green City?

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# How much do you know about Bucharest?



1. What year was this city first mentioned?
2. What year did it become the capital of Romania?
3. What was this city called during the interbellical period?
4. What massive building was ordered by Nicolae Ceaușescu?
5. What rank do you think Bucharest occupied in Mercer's 2016 Quality of Living study? (out of 230)
6. What rank do you think it occupied in the European Green Index City? (out of 30)

*Answers:* 1.1459, 2.1862, 3. "Little Paris", 4."Palace of the Parliament", 5.#109, 6. #28

# Motivation for our study

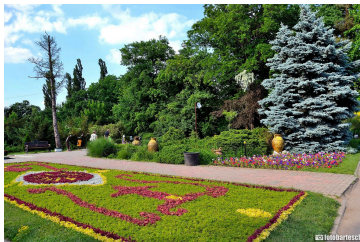
1. Quality of Living
2. Climate Changes

## Our thesis

- Increasing the number of **green spaces**' and their availability to citizens is the mean through which Bucharest can show its concern in dealing with the current impacts of development and climate change.

### Green Spaces?

- ❖ Parks, gardens,



- ❖ Street trees



- ❖ Green rooftops and vertical gardens



# Geophysical Information

- Situated on a plain, deciduous trees, aquatic, herbaceous vegetation
- Has access to two rivers (Dâmbovița and Colentina) and four major lakes (Herăstrău, Floreasca, Colentina, Cișmigiu)
- Has four major parks/recreational areas (Cișmigiu Gardens, Herăstrău Park, Botanical Gardens, Parcul Tineretului)

## Urban Assessment

- Underwent a few major construction and developmental periods (interbellical, communist and post-communist)
- Southern part of the city is considered a disadvantage and less secure area

# Case study – Assessment of Bucharest, in comparison with other EU capitals(1)

City	Urban surface (km <sup>2</sup> )	# people	Density	GDP/ head (€)	EU Entry	GCI 2009 Mark (Rank)	Quality of Life Rank
Bucharest (RO)	285	1,930,000	6773	19,800	2007	39.14 (28)	109
Budapest (HU)	2,538	2,927,000	1153	23,814	2004	57.55 (17)	77
Prague (CZ)	496	2,156,000	4347	25,023	2004	49.78 (24)	69
Sofia (BG)	1,344	1,543,000	1148	12,954	2007	36.85 (29)	115
Zagreb (HR)	162	700,000	4320	19,000	2013	42.36 (26)	98
Amsterdam (NL) <sup>1</sup>	219	1,343,000	4900	41,443	1958	83.03 (5)	11
Copenhagen (DM) <sup>2</sup>	615	1,280,000	2080	43,640	1973	87.31 (1)	9
Stockholm (SE) <sup>3</sup>	381	1,500,000	3600	39,415	1995	86.65 (2)	19
Vienna (AT)	415	1,860,000	43200	35,239	1995	83.34 (4)	1

The cities received European Green Capital distinctions: <sup>1</sup>2011 Finalist, <sup>2</sup>2014 Winner, <sup>3</sup>2010 Winner.

## Case study – Assessment of Bucharest, in comparison with other EU capitals(2)

City	CO <sub>2</sub>	Energy	Buildings	Transport	Water	Waste and land use	Air quality	Environmental Governance
Bucharest (RO)	3.65	3.42	4.79	4.55	4.07	3.62	4.54	2.67
Budapest (HU)	4.85	2.43	5.01	6.64	6.97	6.27	5.85	8
Prague (CZ)	3.44	3.26	3.14	4.71	8.39	6.3	6.37	4.22
Sofia (BG)	2.95	2.16	6.25	4.62	1.83	3.32	4.45	3.89
Zagreb (HR)	3.2	4.34	3.29	5.29	4.43	4.04	4.74	4.56
Amsterdam (NL) <sup>1</sup>	7.1	7.08	9.01	8.44	9.21	8.98	7.48	9.11
Copenhagen (DM) <sup>2</sup>	8.35	8.69	9.17	8.29	8.88	8.05	8.43	10
Stockholm (SE) <sup>3</sup>	8.99	7.61	9.44	8.81	7.14	7.99	9.35	10
Vienna (AT)	7.53	7.76	8.62	8	9.13	8.6	7.59	9.44

The cities received European Green City distinctions: <sup>1</sup>2011 Finalist, <sup>2</sup>2014 Winner, <sup>3</sup>2010 Winner.

# Case study – Environmental Initiatives in Bucharest:

- Green Building Council
- Green Cadastre
- The strategic concept Bucharest 2035
- Văcărești Reserve Park
- Optar (volunteers)

# Proposed solution: how to improve walkability index and fight climate change

- good administrative plan to spread green areas uniformly around the city
  - good infrastructure
  - city green belt/network
  - a green environmental plan
- citizens' engagement in their communities
  - schools
  - public groups
  - organized events
  - feedback
- External initiatives





# Conclusion

- Smart Green Cities are not just pleasant, but necessary!
- Use the useful resources available publicly online
- Cities need to show better management skills, citizens to show more implication
- Green initiatives mentioned above can solve at the same time other problems of Romania's capital: traffic, waste management, water leakage...

# Closing Remarks

- Ritt Bjerregaard, Lord Mayor of Copenhagen:  
*Campaigns to motivate lifestyle change are an important tool. We are also working hard to involve the citizens in developing solutions to the problems.*

- Karmenu Vella, EU Environment, Maritime Affairs and Fisheries Commissionaires:  
*Urban areas concentrate most of the environmental challenges facing our society but also bring together commitment and*



*"...[consider] the needs of the present, without compromising the ability of future generations to meet their own needs. "*

Burlant Report

# Thank you!

- Organizers
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