

Smart cities - A ranking of European medium-sized cities

Final results

cc	city	Smart Economy	Smart People	Smart Governance	Smart Mobility	Smart Environment	Smart Living	total
LU	LUXEMBOURG	1	2	13	6	25	6	1
DK	AARHUS	4	1	6	9	20	12	2
FI	TURKU	16	8	2	21	11	9	3
DK	AALBORG	17	4	4	11	26	11	4
DK	ODENSE	15	3	5	5	50	17	5
FI	TAMPERE	29	7	1	27	12	8	6
FI	OULU	25	6	3	28	14	19	7
NL	EINDHOVEN	6	13	18	2	39	18	8
AT	LINZ	5	25	11	14	28	7	9
AT	SALZBURG	27	30	8	15	29	1	10
FR	MONTPELLIER	30	23	33	24	1	16	11
AT	INNSBRUCK	28	35	9	8	40	3	12
AT	GRAZ	18	32	12	17	31	5	13
NL	NIJMEGEN	24	14	14	3	51	24	14
NL	GRONINGEN	14	9	15	20	37	13	15
BE	GENT	19	16	31	7	48	4	16
SI	LJUBLJANA	8	11	43	31	3	29	17
NL	MAASTRICHT	26	18	17	1	43	14	18
SE	JOENKOEPING	36	10	7	34	22	26	19
BE	BRUGGE	23	20	29	18	44	2	20
NL	ENSCHDEDE	31	17	16	4	35	23	21
DE	GOETTINGEN	11	34	20	12	15	31	22
SE	UMEAA	39	5	10	36	46	10	23
DE	REGENSBURG	9	40	27	19	38	22	24
FR	DIJON	38	29	22	26	9	25	25
FR	NANCY	41	31	23	25	10	20	26
DE	TRIER	21	44	19	10	18	33	27
FR	CLERMONT-FERRAND	33	33	26	29	7	27	28
FR	POITIERS	48	37	28	33	8	15	29
SI	MARIBOR	49	21	37	40	2	32	30
IE	CORK	2	26	25	45	66	21	31
DE	ERFURT	32	47	21	13	21	45	32
DE	MAGDEBURG	47	50	35	22	17	39	33
DE	KIEL	45	45	48	16	23	38	34
HR	ZAGREB	34	24	32	39	36	42	35
UK	CARDIFF	13	39	44	38	60	30	36
UK	LEICESTER	3	42	49	32	64	40	37
UK	PORTSMOUTH	7	38	47	35	63	43	38
UK	ABERDEEN	10	28	42	42	67	35	39
EE	TARTU	40	15	30	47	49	60	40
ES	PAMPLONA	22	48	39	51	32	41	41
CZ	PLZEN	43	49	61	30	54	28	42
ES	VALLADOLID	44	53	34	54	24	46	43
CZ	USTI NAD LABEM	54	51	55	23	55	36	44
IT	TRENTO	20	57	24	65	30	48	45
PT	COIMBRA	52	63	54	49	16	37	46
SK	NITRA	62	46	51	52	19	44	47
PL	RZESZOW	69	19	53	41	56	50	48
IT	TRIESTE	12	61	40	67	45	57	49
ES	OVIEDO	37	55	38	44	68	34	50
IT	ANCONA	35	59	36	68	34	49	51
IT	PERUGIA	42	54	41	66	42	51	52
PL	BIALYSTOK	67	22	59	56	47	55	53
SK	KOSICE	66	43	50	48	53	52	54
RO	TIMISOARA	50	64	64	62	4	59	55
SK	BANSKA BYSTRICA	70	41	52	53	58	47	56
PL	BYDGOSZCZ	68	27	57	46	52	61	57
GR	PATRAI	59	58	46	60	5	67	58
LT	KAUNAS	55	36	66	55	27	65	59
GR	LARISA	61	60	45	63	6	66	60
HU	GYOR	46	68	62	37	41	63	61
PL	SZCZECIN	65	52	58	43	59	56	62
RO	SIBIU	57	65	60	64	13	62	63
PL	KIELCE	63	56	56	57	62	54	64
HU	PECS	56	62	65	58	65	53	65
LV	LIEPAJA	60	12	63	61	61	70	66
HU	MISKOLC	58	67	67	50	70	58	67
RO	CRAIOVA	64	66	68	70	33	64	68
BG	PLEVEN	51	70	69	69	57	69	69
BG	RUSE	53	69	70	59	69	68	70

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List of factors and indicators

cha	factor	indicator	year	spatial level
Smart Economy	Innovative spirit	R&D expenditure in % of GDP	2003	regional
	Innovative spirit	Employment rate in knowledge-intensive sectors	2004	regional
	Innovative spirit	Patent applications per inhabitant	2003	regional
	Entrepreneurship	Self-employment rate	2001	local
	Entrepreneurship	New businesses registered in proportion of existing companies	2001	local
	Economic image & trademarks	Importance as decision-making centre	2006	regional
	Productivity	GDP per employed person	2001	local
	Flexibility of labour market	Unemployment rate	2005	regional
	Flexibility of labour market	Proportion in part-time employment	2001	local
	International embeddedness	Companies with HQ in the city quoted on the national stock market	2001	local
International embeddedness	Air transport of passengers	2003	regional	
International embeddedness	Air transport of freight	2003	regional	
Smart People	Level of qualification	Importance as knowledge centre	2006	regional
	Level of qualification	Population qualified at levels 5-6 ISCED	2001	local
	Level of qualification	Language skills	2005	national
	Affinity to life long learning	Book loans per resident	2001	local
	Affinity to life long learning	Participation in life-long-learning in %	2005	regional
	Affinity to life long learning	Participation in language courses	2005	national
	Social and ethnic plurality	Share of foreigners	2001	local
	Social and ethnic plurality	Share of nationals born abroad	2001	local
	Flexibility	Perception of getting a new job	2006	national
	Creativity	People working in creative industries	2002	national
	Cosmopolitanism/Open-mindedness	Voters turnout at European elections	2001	local
	Cosmopolitanism/Open-mindedness	Immigration-friendly environment	2006	national
	Cosmopolitanism/Open-mindedness	Knowledge about the EU	2006	national
	Participation in public life	Voters turnout at city elections	2001	local
Participation in public life	Participation in voluntary work	2004	national	
Smart Governance	Participation in decision-making	City representatives per resident	2001	local
	Participation in decision-making	Political activity of inhabitants	2004	national
	Participation in decision-making	Importance of politics for inhabitants	2006	national
	Participation in decision-making	Female city representatives	2001	local
	Public and social services	Expenditure of the municipal per resident in PPS	2001	local
	Public and social services	Children in day care	2001	local
	Public and social services	Perception of quality of schools	2005	national
	Transparent governance	Perception on transparency of bureaucracy	2005	national
Transparent governance	Perception on fight against corruption	2005	national	
Smart Mobility	Local accessibility	Public transport network per inhabitant	2001	local
	Local accessibility	Access to public transport	2004	national
	Local accessibility	Quality of public transport	2004	national
	(Inter-)national accessibility	International accessibility	2001	regional
	Availability of ICT-infrastructure	Computers in households	2006	national
	Availability of ICT-infrastructure	Broadband internet access in households	2006	national
	Sustainable, innovative and safe transport systems	Green mobility share	2001	local
	Sustainable, innovative and safe transport systems	Traffic safety	2001	local
Sustainable, innovative and safe transport systems	Use of economical cars	2006	national	
Smart Environment	Attractivity of natural conditions	Sunshine	2001	local
	Attractivity of natural conditions	Green space share	2001	local
	Pollution	Summer smog	2001	local
	Pollution	Particulate matter	2001	local
	Pollution	Fatal chronic lower respiratory diseases	2004	regional
	Environmental protection	Individual efforts on protecting nature	2004	national
Smart Environment	Environmental protection	Opinion on nature protection	2006	national
	Sustainable resource management	Use of water per GDP	2001	local
	Sustainable resource management	Use of electricity per GDP	2001	local
	Sustainable resource management			
Smart Living	Cultural facilities	Cinema attendance	2001	local
	Cultural facilities	Museums visits	2001	local
	Cultural facilities	Theatre attendance	2001	local
	Health conditions	Life expectancy	2001	local
	Health conditions	Hospital beds per inhabitant	2001	local
	Health conditions	Doctors per inhabitant	2001	local
	Health conditions	Perception on quality of the health system	2004	national
	Individual safety	Crime rate	2001	local
	Individual safety	Death rate by assault	2001-03	regional
	Individual safety	Perception on personal safety	2004	national
	Housing quality	Share of housing fulfilling minimal standards	2001	local
	Housing quality	Average living area per person	2001	local
	Housing quality	Satisfaction with personal housing situation	2004	national
	Education facilities	Students per inhabitant	2001	local
	Education facilities	Access to the educational system	2004	national
	Education facilities	Quality of the educational system	2004	national
	Touristic attractivity	Importance of tourist location	2006	regional
	Touristic attractivity	Overnights per year per resident	2001	local
Social cohesion	Perception on personal risk of poverty	2006	national	
Social cohesion	Poverty rate	2005	national	