The Arcadis
Sustainable Cities Index 2024

2,000 days to achieve a sustainable future

Big challenges need bold action to overcome them, and that is where the Global Goals come in. They are a plan agreed to by all world leaders to build a greener, fairer and better world by 2030, and we all have a role in achieving them.

United Nations

The year 2030 looms as a critical point in the global pursuit of sustainable development. Set in 2015, the UN Sustainable Development Goals (SDGs) are a blueprint for a better and more sustainable future. The Nationally Determined Contributions (NDCs), which embody efforts by each country to reduce national emissions and adapt to the impacts of climate change, also point to this date. But while there has been progress in some areas, with 2,000 days until the deadline, there is a growing, global consensus that we haven't done nearly enough to meet these targets.

Since its inception in 2015, the Arcadis Sustainable Cities Index (SCI) has measured sustainability performance by comparing cities with one another. This year, for the first time, we have added a fourth pillar to our Index, which considers the extent to which cities are making sustainable progress.

To drive sustainable progress, cities must take stock of their achievements and redouble efforts on several fronts. This includes enhancing resilience; transitioning to renewable energy sources; ensuring equitable access to basic services, housing, and sustainable transport; and promoting green space, biodiversity, and the efficient use of resources.

To evidence this, the 2024 SCI measures more metrics than ever before, highlighting our evolving understanding of urban sustainability and its many interconnected facets. To accelerate progress in these areas, the public and private sectors must work in unison. This is the only way society's critical industries can quickly adapt and innovate to build the solutions that will bring us back from the brink.

We need to avoid backtracking on our commitments. Meeting the SDGs by 2030 may seem hard to achieve from where we stand now, but moving targets will only disincentivize action. There is no single solution, but cities must prioritize to maintain momentum and play their part in the achievement of the SDGs. The SCI aims to help identify key areas for action and provide insight into the steps taken by cities around the world to drive progress.

This time around, the SCI emphasizes that achieving a relatively strong performance across the three traditional pillars of sustainability isn't enough; those at the top of the Index will continue to face challenges even as they outperform their peers. With easy wins behind them, they now face the barrier of diminishing returns on their sustainability investments as they strive to make impactful contributions toward achieving the SDGs. Although a great deal of progress has been made over the past decade, the scale of the task remains huge, with only 2,000 days to get the job done.

The years between now and 2030 represent a critical juncture within which cities must demonstrate unwavering commitment to accelerate the transition to a much more resilient, sustainable, inclusive, and equitable world.

John Batten
Global Cities Director

The Arcadis Sustainable Cities Index 2024:

2,000 days to achieve a sustainable future

The United Nations Sustainable Development Goals (SDGs) represent a universal call to action, urging nations to address pressing environmental and social challenges and foster a more equitable and sustainable world.

Adopted by all 193 UN member states in 2015, the SDGs provide a comprehensive framework for sustainable progress. From eradicating poverty and hunger to ensuring access to clean water and sustainable energy, the SDGs outline interconnected goals aimed at fostering peace, prosperity, and proper environmental stewardship.

With close to 2,000 days until the 2030 deadline, the urgency to address these global challenges has never been more apparent – and cities stand at the forefront of this battle. Our cities drive change, innovation, and collaboration; their role in advancing the sustainable development agenda cannot be overstated. However, as highlighted by this year's SCI data, there is a pressing need for cities to do more to contribute to the SDGs achievements.

SCI and the Sustainable Development Goals

Introduced in 2015, the Arcadis Sustainable Cities Index serves as a benchmark for measuring the environmental, social, and economic health of cities. These three core pillars – Planet, People, and Profit – are aligned to the overarching goals of the SDGs, providing valuable insights into cities' progress toward achieving these ambitious targets.

Each core pillar of the SCI aligns with specific SDGs, emphasizing the interconnectedness between city performance and global development. From addressing environmental factors such as air pollution and waste management (related to SDGs 6, 7, 12, and 15) to enhancing social well-being and quality of life for citizens (linked to SDGs 1, 2, 3, 10, and 11) and cultivating a thriving business environment (associated with SDGs 5, 8, 9, 11, and 16), the SCI provides a holistic view of cities' contributions toward global goals. The pressing demands of the future require cities to accelerate their transformative journey. Every city, no matter where it is on its sustainability journey, must redouble its efforts if we're going to make the SDGs a reality.

Recognizing this, for the first time in the 10-year history of the SCI, we have added a fourth pillar: Progress. This new pillar measures cities' evolution over the past decade, offering critical insights into their trajectory toward achieving sustainable development, as outlined in the SDGs. The addition of the Progress pillar also makes our overall Index more equitable. Not only does the SCI recognize where these 100 cities currently stand on sustainability, it now also acknowledges the progress these cities have achieved since the inception of the SDGs.

As we navigate the remaining 2,000 days on the road to 2030, let us seize the opportunity to accelerate our efforts, leveraging the insights provided by the SCI to build more resilient, inclusive, and sustainable cities for generations to come.

Sustainable Development Goals

The SDGs are a comprehensive plan of action for people, planet, and prosperity, aimed at strengthening universal peace and freedom. They acknowledge that eradicating poverty in all its forms is the greatest global challenge and is essential for sustainable development. All countries and stakeholders will collaborate to implement this plan, with a commitment to free humanity from poverty, secure the planet, and ensure that no one is left behind.

The 17 Sustainable Development Goals and 169 targets represent an ambitious and transformative vision. These goals build on the Millennium Development Goals and aim to realize human rights, achieve gender equality, and empower all women and girls. They are integrated and indivisible, balancing economic, social, and environmental dimensions to stimulate action over the next 15 years in critical areas for humanity and the planet.

No poverty

End poverty in all its forms everywhere

Zero hunger

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Good health and well-being

Ensure healthy lives and promote well-being for all at all ages

Quality education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Gender equality

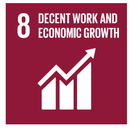
Achieve gender equality and empower all women and girls

Clean water and sanitation

Ensure availability and sustainable management of water and sanitation for all

Affordable and clean energy

Ensure access to affordable, reliable, sustainable, and modern energy for all



Decent work and economic growth

Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

Industry, innovation and infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation

Reduced inequalities

Reduce inequalities within and between countries

Sustainable cities and communities

Make cities and human settlements inclusive, safe, resilient, and sustainable

Responsible consumption and production

Ensure sustainable consumption and production patterns

Climate action

Take urgent action to combat climate change and its impacts

Life below water

Conserve and sustainably use the oceans, seas, and marine resources for sustainable development

Life on land

Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation, and stop biodiversity loss

Peace, justice, and strong institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels

Partnerships for the goals

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Read more about the SDGs

The four pillars of the Sustainable Cities Index

Planet

Measures environmental factors, with indicators including:

- Immediate needs of citizens (air pollution, green spaces, waste management)
- Long-term impacts (energy production and consumption, greenhouse gas emissions)
- Investment in low-carbon infrastructure (renewable energy, sustainable mobility)
- City resilience (natural disaster risk and resilience)
- Green policy.

Related SDGs:

Profit

Measures business environment factors, with indicators including:

- Access to workforce (affordability and living standards)
- Ease of commute (city connectivity and congestion)
- Business infrastructure (access to reliable electricity, quality of internet)
- Economic performance (ease of doing business, economic development, employment).

Related SDGs:

People

Measures social performance and quality of life for citizens, with indicators including:

- Personal well-being (health, education, crime levels)
- Working life (income inequality, work-life balance)
- Urban living (reliability of public transport infrastructure, broadband, Wi-Fi availability).

Related SDGs:

Progress

Measures sustainable progress using key indicators from the Planet, People, and Profit pillars that can be tracked over a 10-year period:

- Planet: drinking water and sanitation, air pollution, energy
- People: health, income inequality, public transport services, education
- Profit: income and living standards, employment.

Related SDGs:

Overall results

Amsterdam tops the 2024 Sustainable Cities Index, ranking sixth in the Planet pillar, 42nd in the People pillar, first in the Profit pillar, and 11th in the all-new Progress pillar. The Dutch capital's strong performance is a clear example of how sustainable developments can continue to be made, no matter how high a city ranks.

One of the driving forces behind Amsterdam's success is its Climate Neutral 2050 Roadmap, which sets out a strategy for reducing the city's carbon emissions by 95% compared to 1990 levels. With the strapline "There's only one moment to be on time," this document outlines the actions needed to reduce energy consumption and emissions across key areas – built environment, mobility, electricity, and industry – and calls on residents to share responsibility for meeting this target.

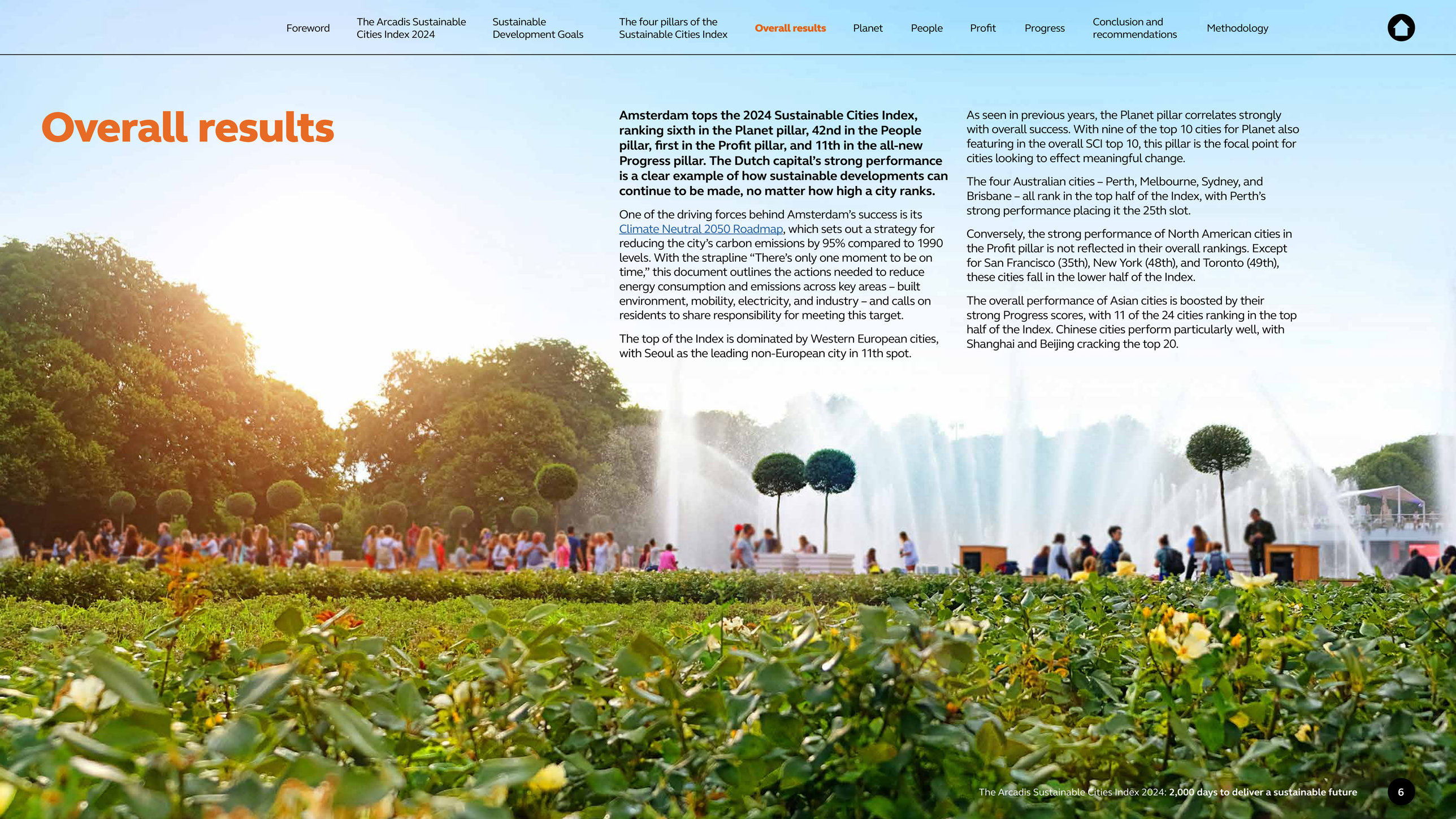
The top of the Index is dominated by Western European cities, with Seoul as the leading non-European city in 11th spot.

As seen in previous years, the Planet pillar correlates strongly with overall success. With nine of the top 10 cities for Planet also featuring in the overall SCI top 10, this pillar is the focal point for cities looking to effect meaningful change.

The four Australian cities – Perth, Melbourne, Sydney, and Brisbane – all rank in the top half of the Index, with Perth's strong performance placing it the 25th slot.

Conversely, the strong performance of North American cities in the Profit pillar is not reflected in their overall rankings. Except for San Francisco (35th), New York (48th), and Toronto (49th), these cities fall in the lower half of the Index.

The overall performance of Asian cities is boosted by their strong Progress scores, with 11 of the 24 cities ranking in the top half of the Index. Chinese cities perform particularly well, with Shanghai and Beijing cracking the top 20.



SCI overall results / Case study:

Future-proofing Amsterdam's global convention hub

Related SDGs:

A clear example of how Amsterdam is actioning its Climate Neutral 2025 Roadmap is the transformation of its RAI Convention Center. The RAI is a key cultural and economic fixture in the city, hosting 500 events a year, with each euro spent there translating to another seven for the capital. However, the center faces significant sustainability challenges.

To address these challenges, Arcadis has co-developed the 'Masterplan RAI 2030,' which maps out a journey to carbon neutrality and, eventually, energy self-sufficiency for the building. The plan looks at energy use, mobility, biodiversity, and climate resilience measures. Once realized, it will remove up to 33,000 diesel trucks from the road each year, while better integrating the RAI into the surrounding community and freeing up valuable land.

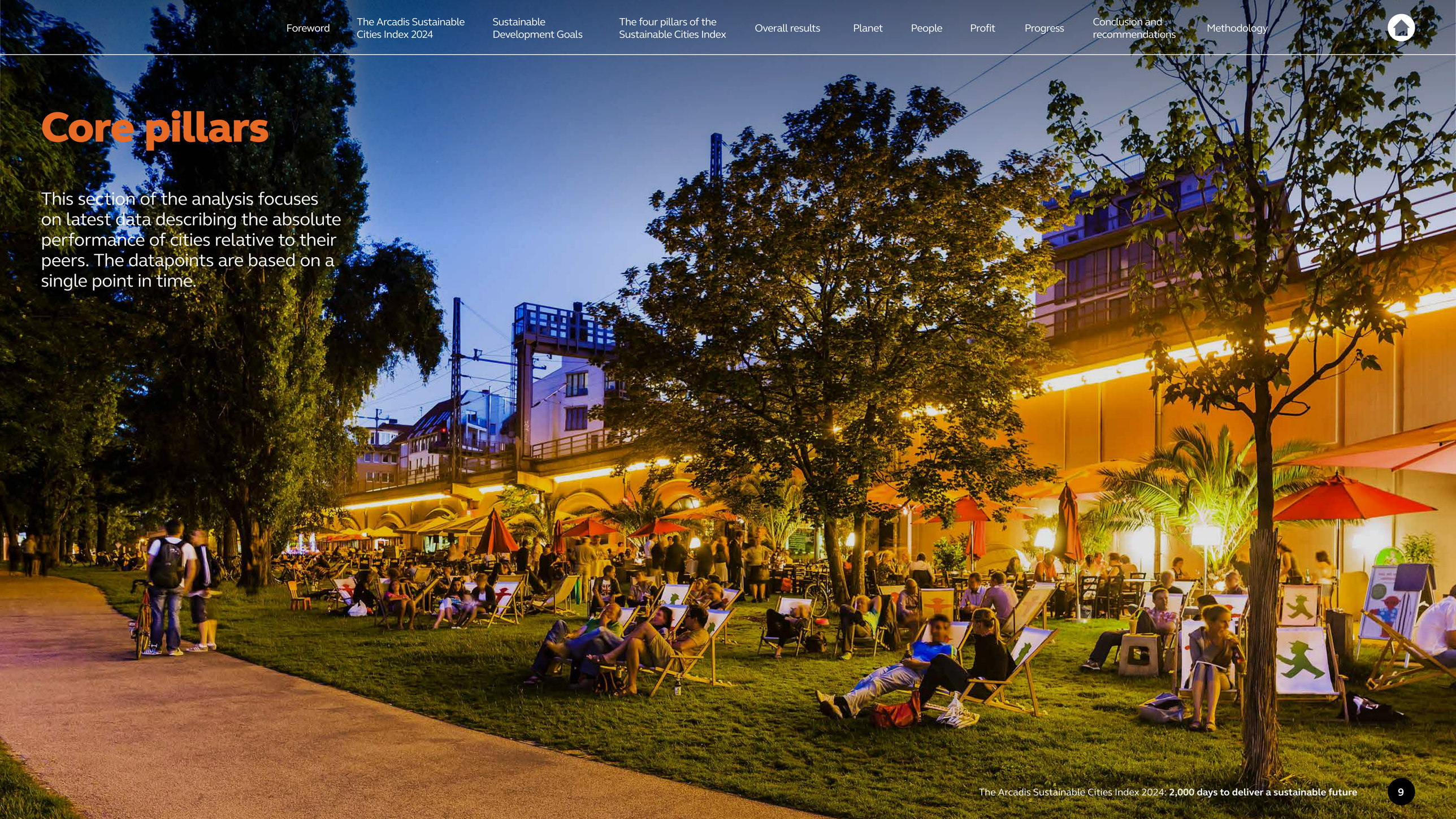
Read more from Arcadis.com →

Sustainable Cities Index 2024 - Top 100

Overall	City	Planet	People	Profit	Progress
1	Amsterdam	6	42	1	11
2	Rotterdam	5	44	14	10
3	Copenhagen	2	11	15	26
4	Frankfurt	7	34	18	30
5	Munich	8	36	22	24
6	Oslo	1	8	28	96
7	Hamburg	9	10	42	27
8	Berlin	3	26	53	20
9	Warsaw	25	4	39	14
10	London	4	29	29	47
11	Seoul	42	5	16	18
12	Stockholm	12	13	4	66
13	Edinburgh	10	9	46	40
14	Paris	19	1	37	55
15	Dublin	37	18	5	41
16	Vienna	16	2	56	42
17	Brussels	11	12	52	36
18	Singapore	36	48	13	25
19	Shanghai	65	24	24	6
20	Beijing	67	27	31	7
21	Zurich	30	52	8	52
22	Tokyo	41	7	50	29
23	Glasgow	13	19	61	39
24	Shenzhen	71	31	38	9
25	Perth	61	22	23	28
26	Wellington	43	53	40	16
27	Lisbon	35	21	67	13
28	Budapest	39	30	60	15
29	Antwerp	17	41	63	34
30	Manchester	14	15	68	46
31	Lyon	29	28	54	38
32	Melbourne	58	17	32	35
33	Sydney	57	16	33	37
34	Prague	38	6	59	44
35	San Francisco	21	76	2	64
36	Vancouver	44	38	19	61
37	Geneva	32	55	35	53
38	Brisbane	47	37	47	33
39	Hong Kong	28	57	21	77
40	Birmingham	15	35	73	45
41	Chengdu	72	51	62	3
42	Macau	40	49	69	17
43	Leeds	20	25	71	50
44	Wuhan	81	46	57	4
45	Riga	27	14	66	56
46	Guangzhou	92	32	58	5
47	Marseille	23	50	64	43
48	New York	22	74	9	72
49	Toronto	62	40	11	83
50	Madrid	34	20	65	59
51	Athens	69	3	77	12
52	Calgary	63	54	12	81
53	Los Angeles	18	79	17	74
54	Barcelona	31	23	75	57
55	Milan	45	39	55	65
56	Boston	26	69	25	86
57	Rome	24	33	74	67
58	Chicago	48	73	6	71
59	Ottawa	55	45	49	63
60	Seattle	33	78	10	92
61	Tianjin	88	47	70	8
62	Taipei	74	43	43	95
63	Dallas	70	87	3	85
64	Philadelphia	51	84	20	76
65	Washington	46	83	27	75
66	Phoenix	50	81	26	87
67	Houston	82	71	7	91
68	Atlanta	53	85	30	84
69	Kuala Lumpur	89	58	72	19
70	Denver	49	82	44	69
71	Detroit	56	75	48	78
72	Pittsburgh	60	70	45	82
73	Baltimore	59	86	41	73
74	Tampa	54	77	51	89
75	Jakarta	97	68	80	1
76	Miami	66	90	36	79
77	Bangkok	83	66	76	22
78	New Orleans	79	88	34	90
79	Hanoi	93	60	81	21
80	Istanbul	75	56	82	58
81	Santiago	86	67	79	31
82	Mexico City	73	97	78	23
83	Mumbai	80	59	85	62
84	Sao Paulo	78	80	86	32
85	Delhi	94	61	88	48
86	Buenos Aires	68	72	87	70
87	Bengaluru	85	64	94	51
88	Hyderabad	95	65	89	49
89	Rio de Janeiro	64	92	90	60
90	Lima	90	89	83	54
91	Kolkata	91	62	95	68
92	Bogota	52	95	96	93
93	Manila	77	94	84	97
94	Cairo	84	63	92	100
95	Lagos	87	96	97	88
96	Kinshasa	99	100	99	2
97	Cape Town	76	98	98	94
98	Nairobi	96	91	91	99
99	Johannesburg	98	99	93	80
100	Karachi	100	93	100	98

Core pillars

This section of the analysis focuses on latest data describing the absolute performance of cities relative to their peers. The datapoints are based on a single point in time.



Planet pillar

Environmental factors are pivotal in driving progress towards the SDGs, with cities at the forefront of the battle against climate change. As sea levels rise and extreme weather events become more frequent and severe, urban centers face unprecedented challenges. The need for disaster resilience plans is now more critical. However, focusing on adaptation alone is not enough; cities must also take proactive steps to reduce their contributions to climate change.

Sustainable energy systems, new building design, retrofit, and low-emission transportation represent powerful tools for urban sustainability. By accelerating progress in these areas, cities can achieve significant results that will propel them toward a more sustainable future. From investing in energy-efficient infrastructure to promoting renewable energy sources, there are countless opportunities for cities to make a meaningful impact.

In the 2024 SCI, Europe's dominance in the Planet pillar is evident. Oslo retains the number one position, having ranked top for the Planet pillar and the overall Index in 2022. Often referred to as the "EV Capital of the World," the Norwegian capital stands as a shining example of sustainable mobility in urban planning, as well as setting the benchmark when it comes to air quality.

However, Oslo's future sustainable progress will tackle the hardest elements of development. In order to meet its goal of being emission-free by 2030, the city will have to respond to challenges including the creation of a circular economy for materials, and the wider promotion of low embodied carbon construction. The implementation of life cycle assessment (LCA) requirements for construction projects from summer 2023 onwards will help accelerate progress.

All four German cities included in the Index – Berlin, Frankfurt, Munich, and Hamburg – claim spots in the top 10 rankings, buoyed by achievements in water sanitation and waste management. However, despite impressive standings, there is no time for complacency. Germany's ambitious aim of achieving net-zero status by 2045 serves as both a beacon of hope and a stark reminder of the work that lies ahead.

Planet pillar

Across the Atlantic, Los Angeles emerges as the lone non-European city to break into the Planet pillar top 20. Fueled by robust climate commitments and renewable energy capacity, LA shines as an exemplar of sustainable practices. However, the SCI data also reveals the need for action to develop the city's natural disaster resilience.

The urgency to fortify cities against climate change is underscored by increasingly frequent and extreme weather events and rising sea levels. From Calgary to Washington, North American cities stand at a pivotal juncture, poised to confront the challenges ahead. Swift and decisive action is needed to reduce the exposure of these urban centers.

When looking at renewable energy production, cities in Brazil, Canada, France, New Zealand, and the Nordic States are forging ahead. Kinshasa also performs particularly well, with hydroelectric power accounting for 96% of domestic power generation in the Democratic Republic of the Congo.

Except for Hong Kong (ranking 28th), Singapore (36th), Macau (40th), Tokyo (41st), and Seoul (42nd), Asian cities rank in the lower half of the Planet pillar – with six of the eight Chinese cities sitting in the bottom third. Asian cities collectively score poorly for air pollution, green spaces, and renewable energy production, emphasizing the importance of aligning national and city priorities with global goals to ensure a unified and comprehensive approach to sustainable development.

Sustainable Cities Index 2024 - Planet

Planet	City	Overall	People	Profit	Progress
1	Oslo	6	8	28	96
2	Copenhagen	3	11	15	26
3	Berlin	8	26	53	20
4	London	10	29	29	47
5	Rotterdam	2	44	14	10
6	Amsterdam	1	42	1	11
7	Frankfurt	4	34	18	30
8	Munich	5	36	22	24
9	Hamburg	7	10	42	27
10	Edinburgh	13	9	46	40
11	Brussels	17	12	52	36
12	Stockholm	12	13	4	66
13	Glasgow	23	19	61	39
14	Manchester	30	15	68	46
15	Birmingham	40	35	73	45
16	Vienna	16	2	56	42
17	Antwerp	29	41	63	34
18	Los Angeles	53	79	17	74
19	Paris	14	1	37	55
20	Leeds	43	25	71	50
21	San Francisco	35	76	2	64
22	New York	48	74	9	72
23	Marseille	47	50	64	43
24	Rome	57	33	74	67
25	Warsaw	9	4	39	14
26	Boston	56	69	25	86
27	Riga	45	14	66	56
28	Hong Kong	39	57	21	77
29	Lyon	31	28	54	38
30	Zurich	21	52	8	52
31	Barcelona	54	23	75	57
32	Geneva	37	55	35	53
33	Seattle	60	78	10	92
34	Madrid	50	20	65	59
35	Lisbon	27	21	67	13
36	Singapore	18	48	13	25
37	Dublin	15	18	5	41
38	Prague	34	6	59	44
39	Budapest	28	30	60	15
40	Macau	42	49	69	17
41	Tokyo	22	7	50	29
42	Seoul	11	5	16	18
43	Wellington	26	53	40	16
44	Vancouver	36	38	19	61
45	Milan	55	39	55	65
46	Washington	65	83	27	75
47	Brisbane	38	37	47	33
48	Chicago	58	73	6	71
49	Denver	70	82	44	69
50	Phoenix	66	81	26	87
51	Philadelphia	64	84	20	76
52	Bogota	92	95	96	93
53	Atlanta	68	85	30	84
54	Tampa	74	77	51	89
55	Ottawa	59	45	49	63
56	Detroit	71	75	48	78
57	Sydney	33	16	33	37
58	Melbourne	32	17	32	35
59	Baltimore	73	86	41	73
60	Pittsburgh	72	70	45	82
61	Perth	25	22	23	28
62	Toronto	49	40	11	83
63	Calgary	52	54	12	81
64	Rio de Janeiro	89	92	90	60
65	Shanghai	19	24	24	6
66	Miami	76	90	36	79
67	Beijing	20	27	31	7
68	Buenos Aires	86	72	87	70
69	Athens	51	3	77	12
70	Dallas	63	87	3	85
71	Shenzhen	24	31	38	9
72	Chengdu	41	51	62	3
73	Mexico City	82	97	78	23
74	Taipei	62	43	43	95
75	Istanbul	80	56	82	58
76	Cape Town	97	98	98	94
77	Manila	93	94	84	97
78	Sao Paulo	84	80	86	32
79	New Orleans	78	88	34	90
80	Mumbai	83	59	85	62
81	Wuhan	44	46	57	4
82	Houston	67	71	7	91
83	Bangkok	77	66	76	22
84	Cairo	94	63	92	100
85	Bengaluru	87	64	94	51
86	Santiago	81	67	79	31
87	Lagos	95	96	97	88
88	Tianjin	61	47	70	8
89	Kuala Lumpur	69	58	72	19
90	Lima	90	89	83	54
91	Kolkata	91	62	95	68
92	Guangzhou	46	32	58	5
93	Hanoi	79	60	81	21
94	Delhi	85	61	88	48
95	Hyderabad	88	65	89	49
96	Nairobi	98	91	91	99
97	Jakarta	75	68	80	1
98	Johannesburg	99	99	93	80
99	Kinshasa	96	100	99	2
100	Karachi	100	93	100	98

Planet pillar: City index highlights

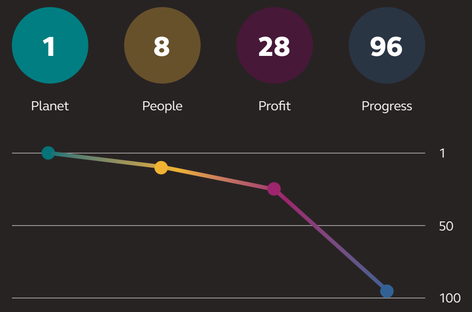
Oslo

Strength

Share of renewable energy production; green spaces; air pollution

Potential for progress

Wastewater treatment



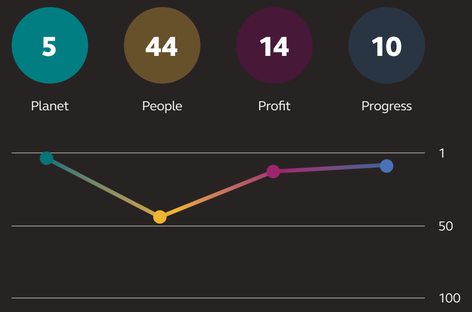
Rotterdam

Strength

Air pollution; CO2 emissions; waste management

Potential for progress

Green spaces; sustainable transport modes; share of renewable energy production



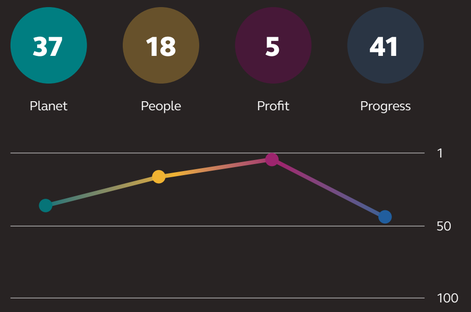
Dublin

Strength

Net-zero targets; air pollution; CO2 emissions

Potential for progress

Basic drinking water services; wastewater treatment; sustainable transport modes



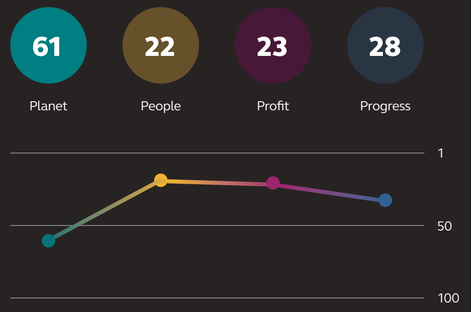
Perth

Strength

Net-zero targets; waste collection; natural disaster resilience

Potential for progress

Percentage of waste treated; number of EV chargers; air pollution



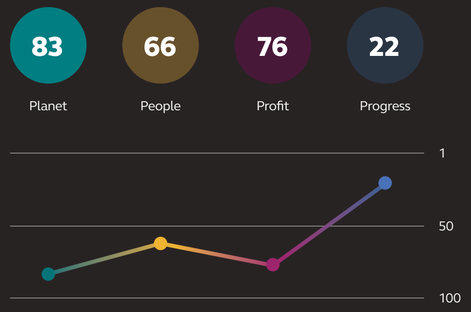
Bangkok

Strength

Basic drinking water services; CO2 emissions; natural disaster resilience

Potential for progress

Wastewater treatment; green spaces; green policy; share of renewable energy production



Planet pillar / Case study:

Supporting Germany's energy transition

Related SDGs:

Germany's Energiewende plan aims to significantly ramp up the production of renewable energy from sources like wind and solar power by 2050. The strategy depends on the reinforcement and upgrading of the transmission grid across the country, and this raised concerns among citizens that these power lines could harm the environment or create other nuisances.

To help address these concerns, Arcadis developed a software solution – mapARC – which is an external-facing project website linked to a web-based geographic information system. Using this solution, we were able to help our client process over 20,000 comments from citizens. This led to 7,000 ideas that were incorporated into the plans. In giving citizens a voice and demonstrating that their feedback was being actively incorporated, the mapARC solution helped build and maintain critical public support for this important project.

Read more from Arcadis.com →

People pillar

Cities are pivotal drivers of progress toward achieving the Sustainable Development Goals, but their success hinges on the active engagement of their citizens. Ultimately, a collective effort to make our cities more sustainable and achieve the SDGs is crucial to improve the quality of life for residents and to safeguard prosperity for future generations.

The COVID-19 pandemic provided an opportunity for reflection on urban functionality and community dynamics. Citizens, as vital stakeholders, can influence policies, demand accountability, and inspire innovation, thereby propelling cities toward sustainability. Inclusive development strategies are essential to ensure that all community members benefit from urban progress.

Paris leads the People pillar, showcasing strengths in public transport, cultural amenities, and work-life balance. Paris' innovative '15-Minute City' initiative has notably reduced vehicular traffic and emissions while enhancing accessibility to essential services and green spaces.

Europe dominates the top of the People pillar, excelling in health, education, and public transport infrastructure.

The pandemic reshaped work dynamics, emphasizing the importance of a healthy work-life balance. Australian, French, and Belgian cities have a lower average number of hours worked a year, indicating a positive work-life balance, while Latin American cities face challenges in this regard.

US cities lag in the People pillar, with all 19 cities ranking in the bottom third due to low affordability and work-life balance scores. The absence of national paid parental leave legislation in the US, unique among OECD members, is a clear illustration of the different approach taken to aspects of social policy.

Affordability emerges as a challenge even in cities with high People pillar rankings. Despite their top 10 status, Paris, Seoul, and Oslo grapple with high cost of living. Maintaining progress in this key area will enhance the lives of all community members, ensuring inclusivity. Both public and private entities play pivotal roles in driving advancements in critical areas such as affordable housing, work-life balance, and paid parental leave.

As we navigate the 2,000 days remaining until the SDG deadline, fostering citizen engagement and addressing social disparities are imperative for realizing sustainable urban futures.

Sustainable Cities Index 2024 - People

People	City	Overall	Planet	Profit	Progress
1	Paris	14	19	37	55
2	Vienna	16	16	56	42
3	Athens	51	69	77	12
4	Warsaw	9	25	39	14
5	Seoul	11	42	16	18
6	Prague	34	38	59	44
7	Tokyo	22	41	50	29
8	Oslo	6	1	28	96
9	Edinburgh	13	10	46	40
10	Hamburg	7	9	42	27
11	Copenhagen	3	2	15	26
12	Brussels	17	11	52	36
13	Stockholm	12	12	4	66
14	Riga	45	27	66	56
15	Manchester	30	14	68	46
16	Sydney	33	57	33	37
17	Melbourne	32	58	32	35
18	Dublin	15	37	5	41
19	Glasgow	23	13	61	39
20	Madrid	50	34	65	59
21	Lisbon	27	35	67	13
22	Perth	25	61	23	28
23	Barcelona	54	31	75	57
24	Shanghai	19	65	24	6
25	Leeds	43	20	71	50
26	Berlin	8	3	53	20
27	Beijing	20	67	31	7
28	Lyon	31	29	54	38
29	London	10	4	29	47
30	Budapest	28	39	60	15
31	Shenzhen	24	71	38	9
32	Guangzhou	46	92	58	5
33	Rome	57	24	74	67
34	Frankfurt	4	7	18	30
35	Birmingham	40	15	73	45
36	Munich	5	8	22	24
37	Brisbane	38	47	47	33
38	Vancouver	36	44	19	61
39	Milan	55	45	55	65
40	Toronto	49	62	11	83
41	Antwerp	29	17	63	34
42	Amsterdam	1	6	1	11
43	Taipei	62	74	43	95
44	Rotterdam	2	5	14	10
45	Ottawa	59	55	49	63
46	Wuhan	44	81	57	4
47	Tianjin	61	88	70	8
48	Singapore	18	36	13	25
49	Macau	42	40	69	17
50	Marseille	47	23	64	43
51	Chengdu	41	72	62	3
52	Zurich	21	30	8	52
53	Wellington	26	43	40	16
54	Calgary	52	63	12	81
55	Geneva	37	32	35	53
56	Istanbul	80	75	82	58
57	Hong Kong	39	28	21	77
58	Kuala Lumpur	69	89	72	19
59	Mumbai	83	80	85	62
60	Hanoi	79	93	81	21
61	Delhi	85	94	88	48
62	Kolkata	91	91	95	68
63	Cairo	94	84	92	100
64	Bengaluru	87	85	94	51
65	Hyderabad	88	95	89	49
66	Bangkok	77	83	76	22
67	Santiago	81	86	79	31
68	Jakarta	75	97	80	1
69	Boston	56	26	25	86
70	Pittsburgh	72	60	45	82
71	Houston	67	82	7	91
72	Buenos Aires	86	68	87	70
73	Chicago	58	48	6	71
74	New York	48	22	9	72
75	Detroit	71	56	48	78
76	San Francisco	35	21	2	64
77	Tampa	74	54	51	89
78	Seattle	60	33	10	92
79	Los Angeles	53	18	17	74
80	Sao Paulo	84	78	86	32
81	Phoenix	66	50	26	87
82	Denver	70	49	44	69
83	Washington	65	46	27	75
84	Philadelphia	64	51	20	76
85	Atlanta	68	53	30	84
86	Baltimore	73	59	41	73
87	Dallas	63	70	3	85
88	New Orleans	78	79	34	90
89	Lima	90	90	83	54
90	Miami	76	66	36	79
91	Nairobi	98	96	91	99
92	Rio de Janeiro	89	64	90	60
93	Karachi	100	100	100	98
94	Manila	93	77	84	97
95	Bogota	92	52	96	93
96	Lagos	95	87	97	88
97	Mexico City	82	73	78	23
98	Cape Town	97	76	98	94
99	Johannesburg	99	98	93	80
100	Kinshasa	96	99	99	2

People pillar: City index highlights

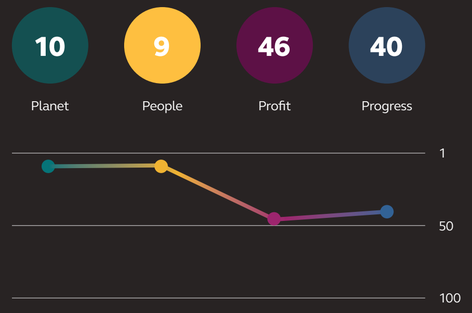
Edinburgh

Strength

Crime rates; female educational attainment; paid maternity leave

Potential for progress

Standard public transport fare; modal split of public transport



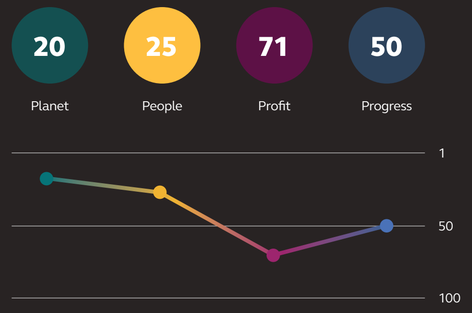
Leeds

Strength

Female educational attainment; income inequality; monthly cost of an apartment

Potential for progress

Standard public transport fare; physicians per 1,000 inhabitants; paid paternity leave



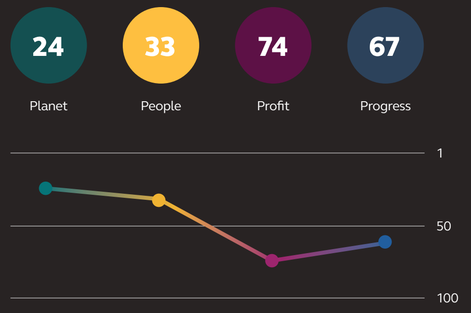
Rome

Strength

Safety when taking public transport; life expectancy; quality of transport infrastructure

Potential for progress

Average annual leave; modal split of public transport; paid paternity leave



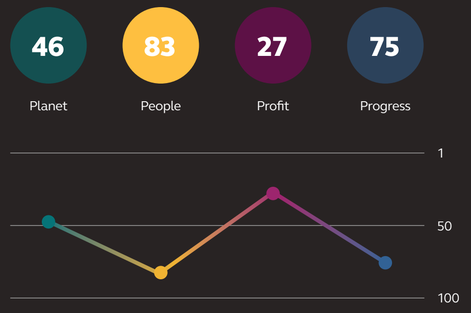
Washington

Strength

Female educational attainment; quality of transport infrastructure

Potential for progress

Paid maternity leave; average annual leave; monthly cost of an apartment



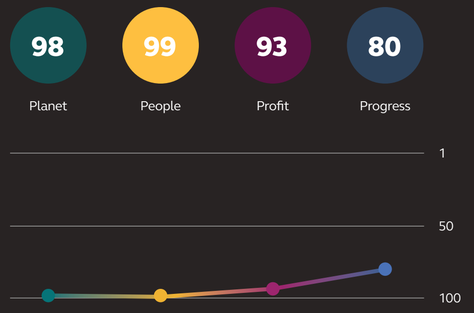
Johannesburg

Strength

Monthly cost of an apartment; cost of living

Potential for progress

Safety when taking public transport; modal split of public transport; income inequality



People pillar / Case study:

Building urban forests in Paris

Related SDGs:

While renowned for its architecture, Paris lacks green spaces, causing heat to soar amid the concrete. To combat this, the Paris city council is planning five urban forests across iconic locations. Arcadis is leading studies for three sites: Hôtel de Ville, Euronext Paris square, and Place Saint-Gervais, set to house a memorial for the 2015 Paris attacks.

These forests promise a cooler Paris and cleaner air for residents and tourists alike. Increasing access to green spaces will also have benefits for mental health. Beyond battling global warming and enhancing biodiversity, this initiative signifies a shift in urban planning towards prioritizing residents' well-being.

Read more from Arcadis.com →

Profit pillar

Economic success can fuel sustainable development when coupled with initiatives benefiting communities and the environment. A thriving economy should foster innovation and facilitate investment in crucial infrastructure, green initiatives, and social programs.

This year's SCI indicates a growing convergence between the Planet and Profit pillars, highlighting the intertwining of environmental action and economic prosperity. As the repercussions of fossil fuel use become more apparent, many businesses are hastening their adoption of alternative energy sources as part of a more sustainable energy mix. Investment in environmental initiatives, in turn, generates economic opportunities, including job creation in renewable energy, energy efficiency, and green technologies. Therefore, prioritizing environmental sustainability not only safeguards the planet; it's good for city economies.

Amsterdam secures the top position for the Profit pillar, excelling in income and living standards, employment, and transport infrastructure. Notably, it is a trailblazer in adopting the Doughnut economic model, with Brussels, Copenhagen, and Berlin following suit. This contemporary economic framework ensures the fulfillment of basic needs for a high quality of life, while respecting the planet's ecological boundaries.

North American and European cities dominate the Profit pillar, each excelling in different areas. North American cities particularly shine in ease of doing business, GDP per capita, and employment rates. Meanwhile, European cities exhibit strengths in income and living standards, transport infrastructure, and economic development. Both regions can draw inspiration from each other to continue making progress and development in all crucial areas for economic success.

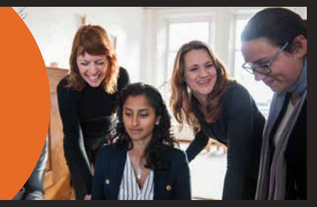
Singapore emerges as the top-performing Asian city in the Profit pillar, securing the 13th spot in the rankings, followed closely by Seoul (16th) and Hong Kong (21st). These cities all boast strong scores in ease of doing business. Meanwhile, Chinese cities do not fare as well, with the majority ranking in the bottom half of this pillar.

While cities such as London, Singapore, New York, Oslo, and Zurich boast robust business success, they face a critical challenge in ensuring their employees share in this prosperity. The Index underscores that wage levels and living standards do not always keep pace with the cost of living, highlighting the need for inclusive development strategies in these thriving metropolises. Enabling people to live and work in these cities is crucial, not just for economic success but for sustainable growth and development across all pillars.

Sustainable Cities Index 2024 - Profit

Profit	City	Overall	Planet	People	Progress
1	Amsterdam	1	6	42	11
2	San Francisco	35	21	76	64
3	Dallas	63	70	87	85
4	Stockholm	12	12	13	66
5	Dublin	15	37	18	41
6	Chicago	58	48	73	71
7	Houston	67	82	71	91
8	Zurich	21	30	52	52
9	New York	48	22	74	72
10	Seattle	60	33	78	92
11	Toronto	49	62	40	83
12	Calgary	52	63	54	81
13	Singapore	18	36	48	25
14	Rotterdam	2	5	44	10
15	Copenhagen	3	2	11	26
16	Seoul	11	42	5	18
17	Los Angeles	53	18	79	74
18	Frankfurt	4	7	34	30
19	Vancouver	36	44	38	61
20	Philadelphia	64	51	84	76
21	Hong Kong	39	28	57	77
22	Munich	5	8	36	24
23	Perth	25	61	22	28
24	Shanghai	19	65	24	6
25	Boston	56	26	69	86
26	Phoenix	66	50	81	87
27	Washington	65	46	83	75
28	Oslo	6	1	8	96
29	London	10	4	29	47
30	Atlanta	68	53	85	84
31	Beijing	20	67	27	7
32	Melbourne	32	58	17	35
33	Sydney	33	57	16	37
34	New Orleans	78	79	88	90
35	Geneva	37	32	55	53
36	Miami	76	66	90	79
37	Paris	14	19	1	55
38	Shenzhen	24	71	31	9
39	Warsaw	9	25	4	14
40	Wellington	26	43	53	16
41	Baltimore	73	59	86	73
42	Hamburg	7	9	10	27
43	Taipei	62	74	43	95
44	Denver	70	49	82	69
45	Pittsburgh	72	60	70	82
46	Edinburgh	13	10	9	40
47	Brisbane	38	47	37	33
48	Detroit	71	56	75	78
49	Ottawa	59	55	45	63
50	Tokyo	22	41	7	29
51	Tampa	74	54	77	89
52	Brussels	17	11	12	36
53	Berlin	8	3	26	20
54	Lyon	31	29	28	38
55	Milan	55	45	39	65
56	Vienna	16	16	2	42
57	Wuhan	44	81	46	4
58	Guangzhou	46	92	32	5
59	Prague	34	38	6	44
60	Budapest	28	39	30	15
61	Glasgow	23	13	19	39
62	Chengdu	41	72	51	3
63	Antwerp	29	17	41	34
64	Marseille	47	23	50	43
65	Madrid	50	34	20	59
66	Riga	45	27	14	56
67	Lisbon	27	35	21	13
68	Manchester	30	14	15	46
69	Macau	42	40	49	17
70	Tianjin	61	88	47	8
71	Leeds	43	20	25	50
72	Kuala Lumpur	69	89	58	19
73	Birmingham	40	15	35	45
74	Rome	57	24	33	67
75	Barcelona	54	31	23	57
76	Bangkok	77	83	66	22
77	Athens	51	69	3	12
78	Mexico City	82	73	97	23
79	Santiago	81	86	67	31
80	Jakarta	75	97	68	1
81	Hanoi	79	93	60	21
82	Istanbul	80	75	56	58
83	Lima	90	90	89	54
84	Manila	93	77	94	97
85	Mumbai	83	80	59	62
86	Sao Paulo	84	78	80	32
87	Buenos Aires	86	68	72	70
88	Delhi	85	94	61	48
89	Hyderabad	88	95	65	49
90	Rio de Janeiro	89	64	92	60
91	Nairobi	98	96	91	99
92	Cairo	94	84	63	100
93	Johannesburg	99	98	99	80
94	Bengaluru	87	85	64	51
95	Kolkata	91	91	62	68
96	Bogota	92	52	95	93
97	Lagos	95	87	96	88
98	Cape Town	97	76	98	94
99	Kinshasa	96	99	100	2
100	Karachi	100	100	93	98

Profit pillar: City index highlights



1 Overall SCI Ranking

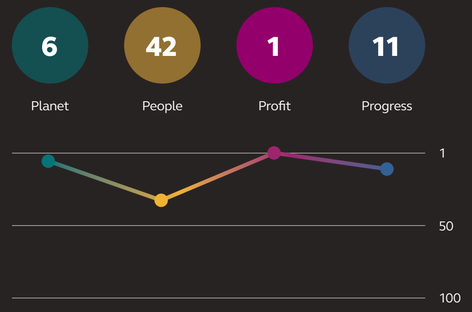
Amsterdam

Strength

Female labor force participation; change in average wage; citizen participation

Potential for progress

Ride share fleet size, number of publicly listed HQ companies



63 Overall SCI Ranking

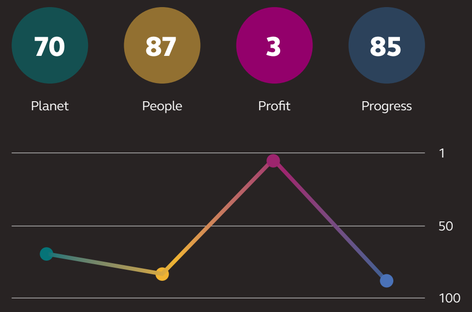
Dallas

Strength

Ease of doing business; access to reliable electricity; traffic congestion

Potential for progress

Change in annual wage and living standard; mobile download speed



22 Overall SCI Ranking

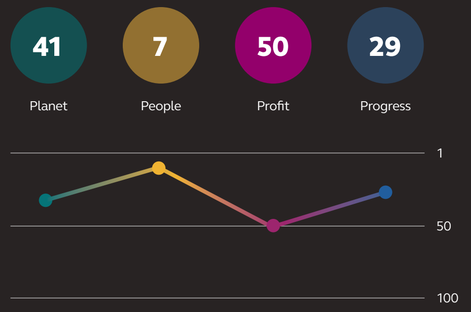
Tokyo

Strength

City connectivity; employment rate; citizen participation

Potential for progress

Change in annual wage; traffic congestion; mobile download speed



74 Overall SCI Ranking

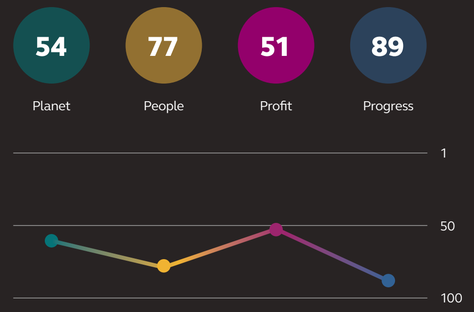
Tampa

Strength

Access to reliable electricity; ease of doing business; employment rate

Potential for progress

Number of job openings; market capitalization of HQ firms; purchasing power



92 Overall SCI Ranking

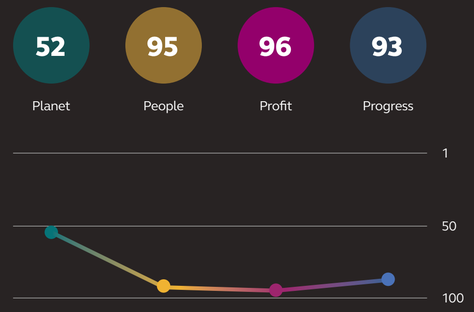
Bogota

Strength

Access to reliable electricity; city connectivity

Potential for progress

Change in annual living standard; mobile download speed; GDP per capita



Profit pillar / Case study:

Downtown Detroit and Cleveland redevelopment plans

Related SDGs:

Once plagued by industrial decline and racial tensions, downtown Cleveland, Ohio, and Detroit, Michigan, are undergoing revitalization thanks to real estate firm Bedrock Detroit's sustainable redevelopment plans. Using data-driven approaches, Arcadis is helping to transform waterfront districts into vibrant, transit-oriented communities. Our plans address historical inequities, focusing on mixed-use developments and social services.

In Cleveland, the plan supports population growth, while in Detroit, it fosters an inclusive community with equal opportunities for all. We're reconnecting Detroit neighborhoods by removing barriers like the I-375 Freeway and enhancing pedestrian infrastructure. Bedrock Detroit is collaborating with local stakeholders to create resilient, inclusive downtown cores. These walkable neighborhoods will offer residents access to amenities within minutes.

Read more from Arcadis.com →

Progress pillar

This year's Index is not only interested in where cities are currently positioned on their sustainability journeys but also how far they've come, introducing a new pillar: Progress.

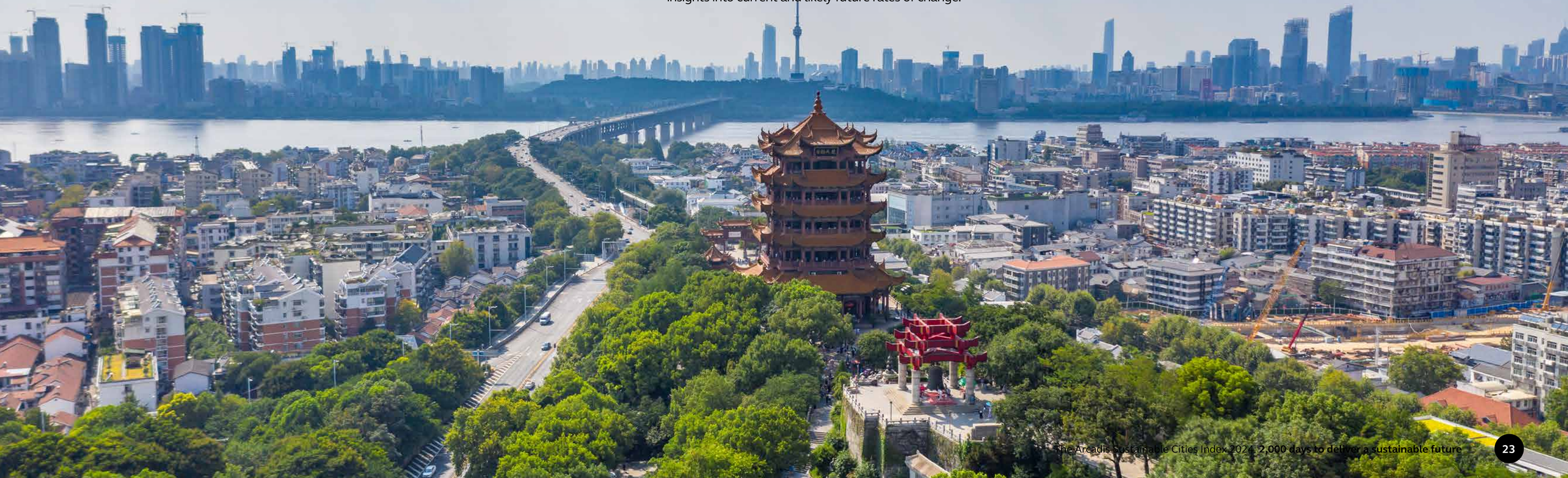
The Progress pillar measures change over time against key sustainability performance metrics, tracking the impact of 10 years of sustainability interventions. By contrast, the core SCI pillars of Planet, People, and Profit compare absolute performance at a point in time. Often the fastest progress occurs at the start of a sustainability journey, so rapid progress is not always synonymous with a high score against the metrics in the three core pillars.

In the overall assessment, the Progress pillar is weighted equally with the three core pillars of sustainability. When we consider sustainability performance through the dual lenses of the progress scores and the core metrics, we develop further insights into current and likely future rates of change.

The introduction of a progress dimension emphasizes the importance of continuous advancement for all cities, regardless of their current sustainability performance, to achieve the SDGs.

There are four groups of cities that are particularly interesting to look at:

- **Cities with sustained momentum:** Cities that perform well across the core SCI pillars and the Progress pillar.
- **Cities with falling momentum:** Cities that perform well across the core SCI pillars but less well for Progress.
- **Cities with early momentum:** Cities with high Progress scores but with low core SCI rankings.
- **Cities lacking momentum:** Cities scoring towards the bottom of both core and Progress rankings.



Sustainable Cities Index 2024 - Progress

Progress	City	Overall	Planet	People	Profit
1	Jakarta	75	97	68	80
2	Kinshasa	96	99	100	99
3	Chengdu	41	72	51	62
4	Wuhan	44	81	46	57
5	Guangzhou	46	92	32	58
6	Shanghai	19	65	24	24
7	Beijing	20	67	27	31
8	Tianjin	61	88	47	70
9	Shenzhen	24	71	31	38
10	Rotterdam	2	5	44	14
11	Amsterdam	1	6	42	1
12	Athens	51	69	3	77
13	Lisbon	27	35	21	67
14	Warsaw	9	25	4	39
15	Budapest	28	39	30	60
16	Wellington	26	43	53	40
17	Macau	42	40	49	69
18	Seoul	11	42	5	16
19	Kuala Lumpur	69	89	58	72
20	Berlin	8	3	26	53
21	Hanoi	79	93	60	81
22	Bangkok	77	83	66	76
23	Mexico City	82	73	97	78
24	Munich	5	8	36	22
25	Singapore	18	36	48	13
26	Copenhagen	3	2	11	15
27	Hamburg	7	9	10	42
28	Perth	25	61	22	23
29	Tokyo	22	41	7	50
30	Frankfurt	4	7	34	18
31	Santiago	81	86	67	79
32	Sao Paulo	84	78	80	86
33	Brisbane	38	47	37	47
34	Antwerp	29	17	41	63
35	Melbourne	32	58	17	32
36	Brussels	17	11	12	52
37	Sydney	33	57	16	33
38	Lyon	31	29	28	54
39	Glasgow	23	13	19	61
40	Edinburgh	13	10	9	46
41	Dublin	15	37	18	5
42	Vienna	16	16	2	56
43	Marseille	47	23	50	64
44	Prague	34	38	6	59
45	Birmingham	40	15	35	73
46	Manchester	30	14	15	68
47	London	10	4	29	29
48	Delhi	85	94	61	88
49	Hyderabad	88	95	65	89
50	Leeds	43	20	25	71
51	Bengaluru	87	85	64	94
52	Zurich	21	30	52	8
53	Geneva	37	32	55	35
54	Lima	90	90	89	83
55	Paris	14	19	1	37
56	Riga	45	27	14	66
57	Barcelona	54	31	23	75
58	Istanbul	80	75	56	82
59	Madrid	50	34	20	65
60	Rio de Janeiro	89	64	92	90
61	Vancouver	36	44	38	19
62	Mumbai	83	80	59	85
63	Ottawa	59	55	45	49
64	San Francisco	35	21	76	2
65	Milan	55	45	39	55
66	Stockholm	12	12	13	4
67	Rome	57	24	33	74
68	Kolkata	91	91	62	95
69	Denver	70	49	82	44
70	Buenos Aires	86	68	72	87
71	Chicago	58	48	73	6
72	New York	48	22	74	9
73	Baltimore	73	59	86	41
74	Los Angeles	53	18	79	17
75	Washington	65	46	83	27
76	Philadelphia	64	51	84	20
77	Hong Kong	39	28	57	21
78	Detroit	71	56	75	48
79	Miami	76	66	90	36
80	Johannesburg	99	98	99	93
81	Calgary	52	63	54	12
82	Pittsburgh	72	60	70	45
83	Toronto	49	62	40	11
84	Atlanta	68	53	85	30
85	Dallas	63	70	87	3
86	Boston	56	26	69	25
87	Phoenix	66	50	81	26
88	Lagos	95	87	96	97
89	Tampa	74	54	77	51
90	New Orleans	78	79	88	34
91	Houston	67	82	71	7
92	Seattle	60	33	78	10
93	Bogota	92	52	95	96
94	Cape Town	97	76	98	98
95	Taipei	62	74	43	43
96	Oslo	6	1	8	28
97	Manila	93	77	94	84
98	Karachi	100	100	93	100
99	Nairobi	98	96	91	91
100	Cairo	94	84	63	92

Progress pillar: City index highlights

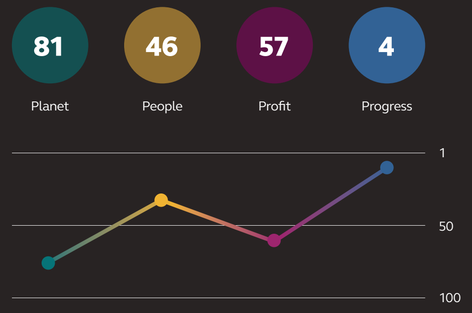
Wuhan

Strength

Female educational attainment; quality of transport infrastructure; share of renewable energy production

Potential for progress

Basic drinking water services



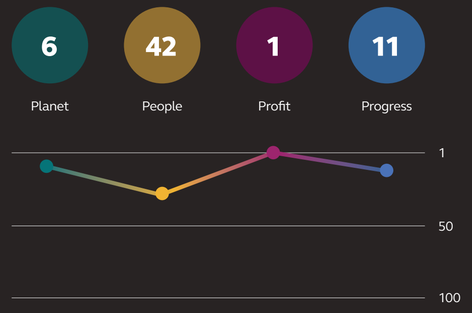
Amsterdam

Strength

Female labor force participation; physicians per 1,000 people; share of renewable energy production

Potential for progress

Basic drinking water services; quality of transport infrastructure



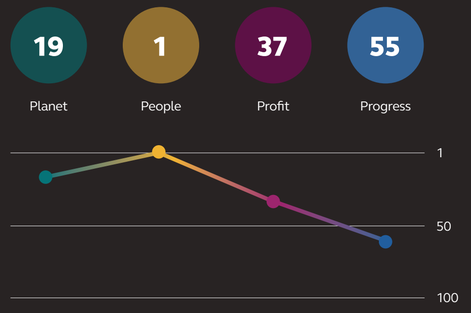
Paris

Strength

Female educational attainment; female labor force participation; income inequality

Potential for progress

Basic drinking water services; quality of transport infrastructure; physicians per 1,000 people



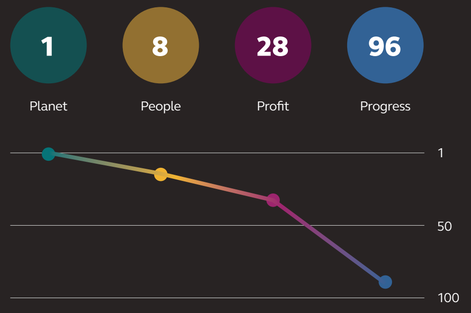
Oslo

Strength

Female educational attainment; physicians per 1,000 people

Potential for progress

Change in annual living standard; female labor force participation; share of renewable energy production



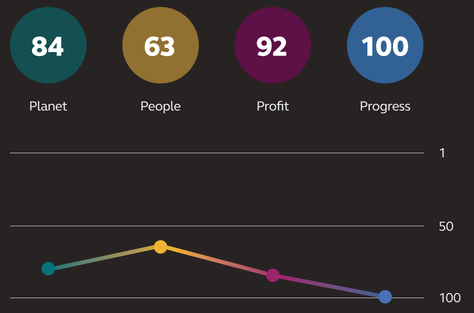
Cairo

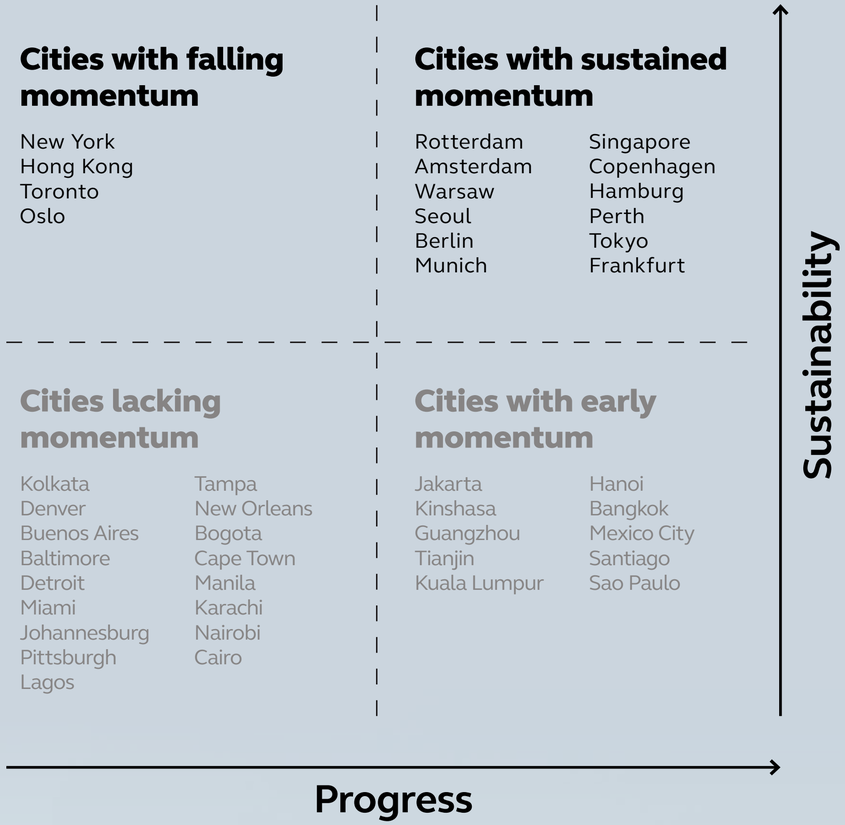
Strength

Female educational attainment

Potential for progress

Female labor force participation; quality of transport infrastructure; share of renewable energy production





Cities with sustained momentum

These are cities that combine high levels of current sustainability with significant progress over the past decade. Many European cities have achieved this feat, cementing their position at the top of the combined Index. Amsterdam, Rotterdam, Warsaw, Copenhagen, Frankfurt, Munich, Hamburg, and Berlin all feature in the top third of the Progress pillar and the top third of the core SCI pillars.

This year's top sustainable city, Amsterdam, has made considerable strides in the last decade, particularly with respect to increasing its share of sustainable energy sources. With ambitious 2030 goals around reducing absolute energy consumption and further increasing the production of renewable energy, Amsterdam currently shows no signs of slowing down.

The challenge for cities like Amsterdam or Copenhagen is to continue their rapid trajectory, leading from the front. Maintaining progress once high levels of performance are reached inevitably becomes more difficult as the law of diminishing returns kicks in, but there are always areas to improve on. The critical factor is effective prioritization, balancing costs, overall impact, and distribution of impacts.

To meet increasing energy transition targets, cities in this group can all continue to invest in their management of renewable energy sources including new capacity, storage, and microgrids. There is also substantial work to be done to improve affordability in these cities to enhance the lives of residents, through diversifying building stock and by retrofitting to improve energy performance. Within the Profit pillar, all cities can improve upon the availability of transport, in particular their sustainable mobility fleet size. Except for Amsterdam, our subset of cities with momentum all have room for growth when it comes to attracting large, publicly listed firms to headquarter in the city. This will have a further impact on sustainable growth and global economic standing.

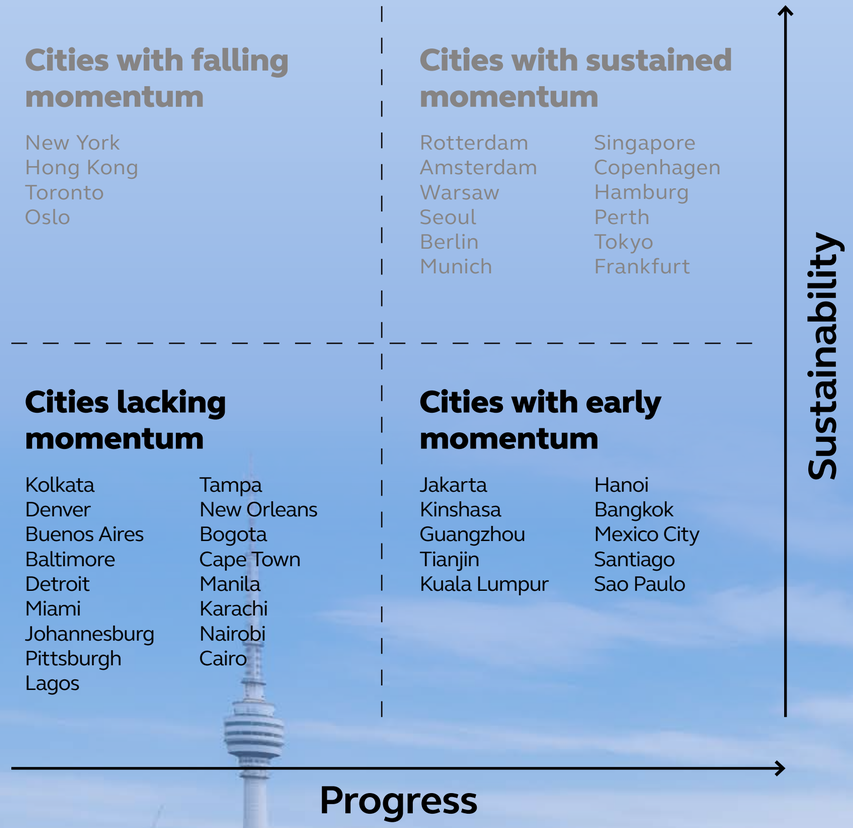
Cities with falling momentum

In contrast to our highest performing cities, we also have those cities that score highly across the core SCI metrics but which have demonstrated a slower rate of progress in the past decade. Some of these cities are at the top of the rankings and illustrate the challenge of diminishing returns. The more sustainable a city becomes, the tougher it is to make additional improvements to performance. Many of the cities at the top of the SCI must therefore push the boundaries of innovation and efficiency to continue their journey toward higher levels of sustainability.

This challenge is highly relevant as more cities progress toward their SDG goals. The going will get harder rather than easier.

Oslo is a leading example of a highly sustainable city (sixth in the overall Index) that now faces the challenge of maintaining momentum as it moves toward the later stages of sustainable development. This is reflected in its position in the bottom 10 of the Progress pillar. Mature cities, including Hong Kong, New York, and Toronto, all face a similar challenge.

The task of reducing greenhouse gas emissions shifts from relatively easy sources including energy generation, public transport, and private cars to hard to abate sectors including domestic heat, industrial processes, and goods haulage. Making the right choices and designing the right policy interventions will play an important role in maintaining progress at a slower rate. Improving cost of living is another key area that these cities can look to address to ensure they continue to function effectively as desirable places to live and work. Potential interventions at a city level include a diverse housing supply and an investment in skills.



Cities with early momentum

The Progress pillar ranking demonstrates that, for fast growing cities, early steps in sustainable development can have a huge impact, generating momentum and motivation for further advancements.

The Indonesian metropolis of Jakarta takes the lead in the Progress pillar. Published in 2021, the city's Sustainable Energy Transition Roadmap sets ambitious targets to further reduce energy consumption and associated emissions. The progress made already may have been driven, in part, by the urgency of the challenges the city faces. City authorities in Jakarta may not be able to maintain this momentum in future years. Long-term flood risks have prompted the relocation of the federal government to a purpose-built city, Nusantara. However, Jakarta will remain an economic hub and the home for millions of citizens, and so will need to continue its sustainability investments despite an uncertain future.

The key characteristic of this grouping of cities is that, despite substantial progress over the past decade, cities in this group still fall in the bottom third of the core SCI ratings. Clearly these cities need to maintain or even accelerate their momentum to improve the quality of life for citizens and to contribute to national and global sustainability targets. The core SCI data reveals areas for potential progress, such as the development of green spaces, sustainable transport infrastructure (including EV chargers and shared bicycle hire), and further investment in waste management. In some cities, there is also a need to address the accessibility of healthcare as well as the work-life balance of citizens.

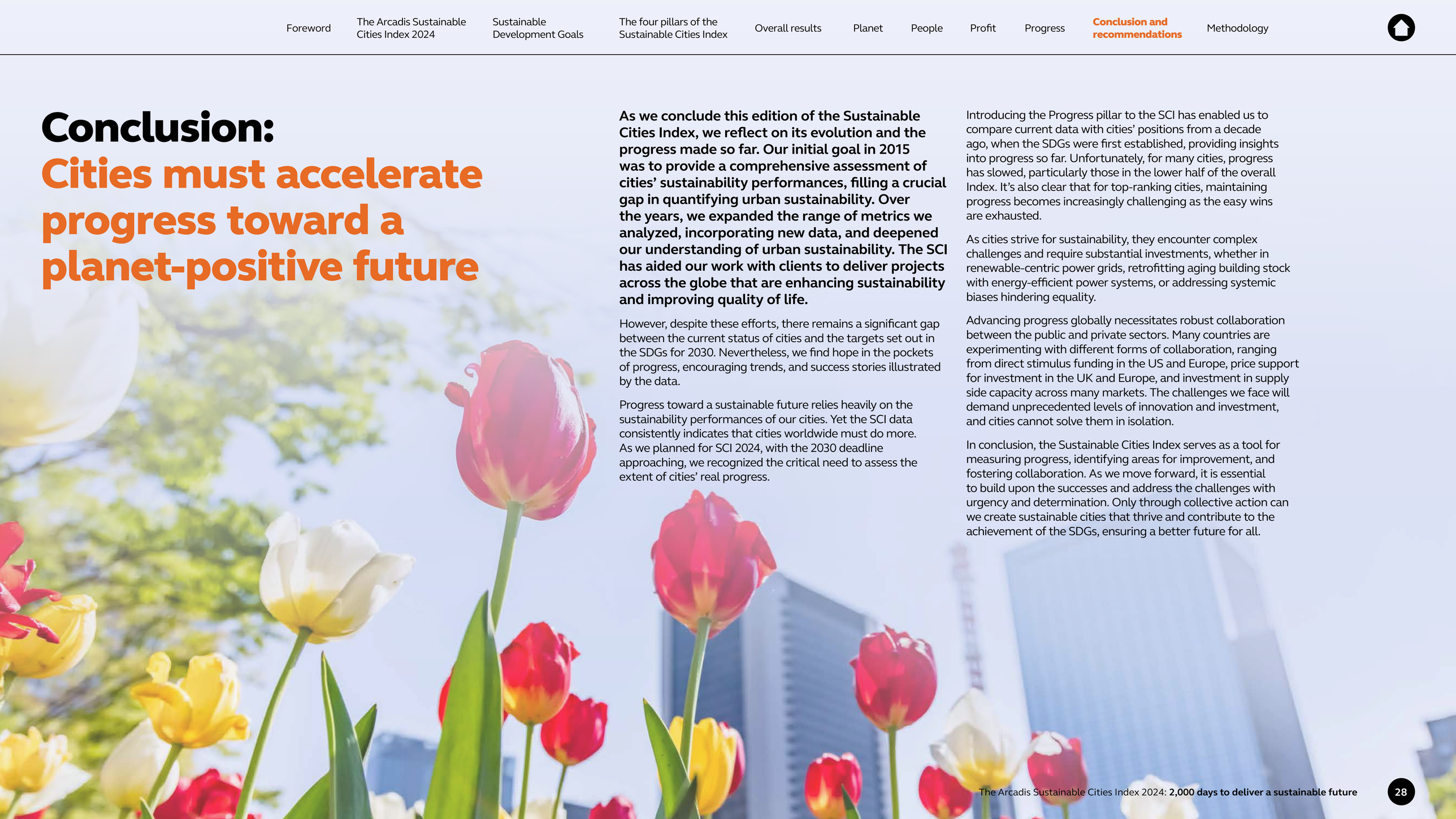
Cities lacking momentum

Progress toward global sustainability goals hinges on supporting cities at the bottom of the Index, particularly as some are amongst the largest and fastest growing cities in the world. Cities that rank both toward the bottom of the Progress pillar and the core SCI index face overwhelming challenges. However, there are lessons that can be taken from cities with early momentum, such as Santiago, as well as cities with sustained momentum, such as Hamburg. Ultimately, planning and delivering a sustainable future will require the public and private sectors and international institutions to come together to achieve positive change. The pace of roll-out of digital technologies in African and Indian cities demonstrates the potential for 'leapfrog' development that can potentially make a meaningful impact on quality of life even if positions in rankings will remain low into the foreseeable future.

There is an intriguing sub-group of cities in this category, centered on the United States. In our 2022 SCI, we focused on American cities that were characterized by 'profit without prosperity' – in other words cities that scored highly for many aspects of business performance in the Profit pillar, but which scored markedly low for cities in developed countries for the People and Planet pillars.

Our Progress pillar highlights that a significant number of these cities have made very little progress over the past decade, suggesting that there are legacy issues, including deindustrialization, which are causing headwinds that result in diminished returns on investment. The implication is that, while fast-growing cities in emerging economies have the potential to create momentum in sustainable development, this will be much harder to achieve in cities that have completed their growth phase. At a country level and to maintain progress towards the SDGs, attention should be focused more on the cites lacking momentum, in addition to the high performers in our 'sustained momentum' category.

Conclusion:
Cities must accelerate progress toward a planet-positive future



As we conclude this edition of the Sustainable Cities Index, we reflect on its evolution and the progress made so far. Our initial goal in 2015 was to provide a comprehensive assessment of cities' sustainability performances, filling a crucial gap in quantifying urban sustainability. Over the years, we expanded the range of metrics we analyzed, incorporating new data, and deepened our understanding of urban sustainability. The SCI has aided our work with clients to deliver projects across the globe that are enhancing sustainability and improving quality of life.

However, despite these efforts, there remains a significant gap between the current status of cities and the targets set out in the SDGs for 2030. Nevertheless, we find hope in the pockets of progress, encouraging trends, and success stories illustrated by the data.

Progress toward a sustainable future relies heavily on the sustainability performances of our cities. Yet the SCI data consistently indicates that cities worldwide must do more. As we planned for SCI 2024, with the 2030 deadline approaching, we recognized the critical need to assess the extent of cities' real progress.

Introducing the Progress pillar to the SCI has enabled us to compare current data with cities' positions from a decade ago, when the SDGs were first established, providing insights into progress so far. Unfortunately, for many cities, progress has slowed, particularly those in the lower half of the overall Index. It's also clear that for top-ranking cities, maintaining progress becomes increasingly challenging as the easy wins are exhausted.

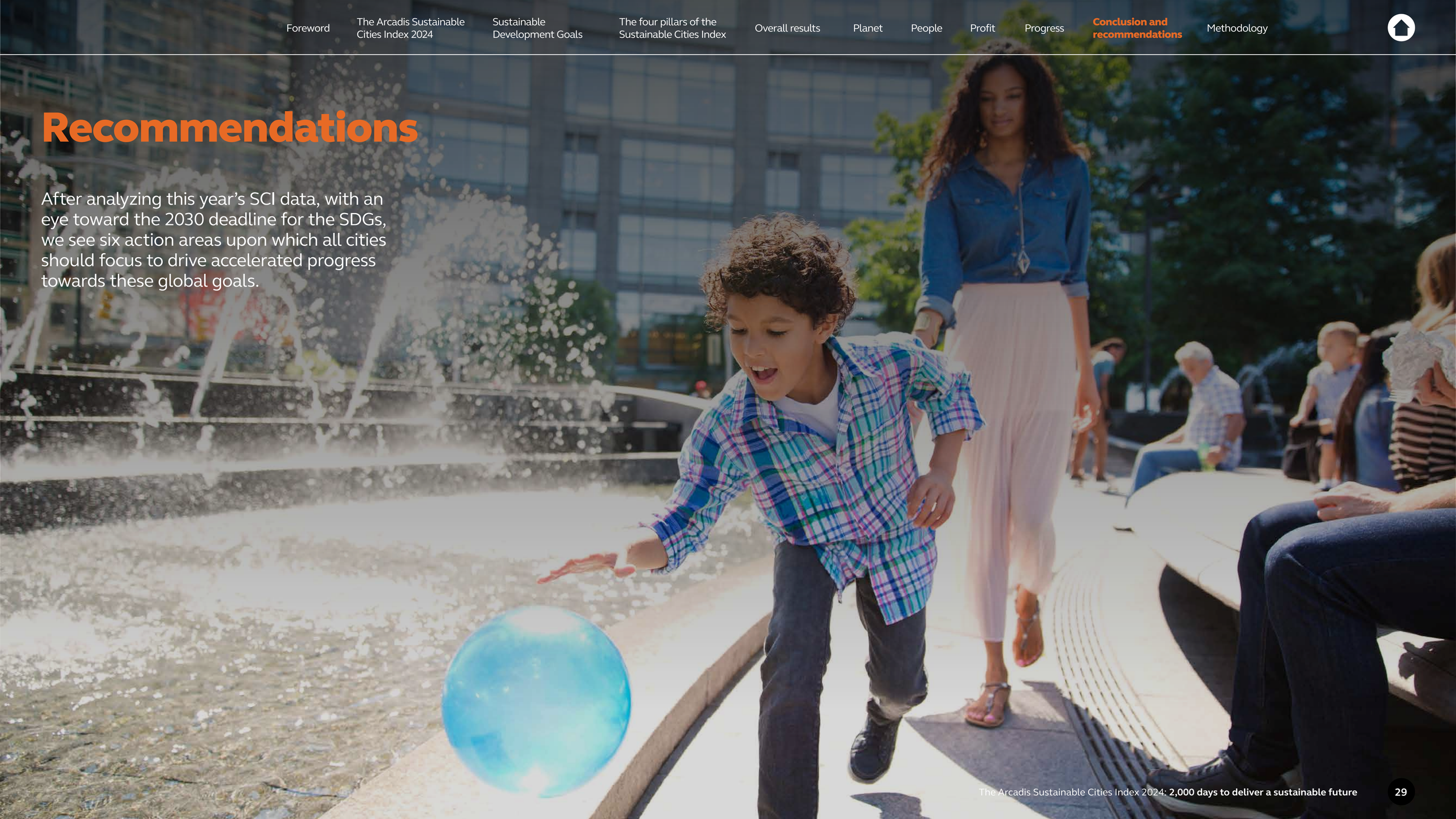
As cities strive for sustainability, they encounter complex challenges and require substantial investments, whether in renewable-centric power grids, retrofitting aging building stock with energy-efficient power systems, or addressing systemic biases hindering equality.

Advancing progress globally necessitates robust collaboration between the public and private sectors. Many countries are experimenting with different forms of collaboration, ranging from direct stimulus funding in the US and Europe, price support for investment in the UK and Europe, and investment in supply side capacity across many markets. The challenges we face will demand unprecedented levels of innovation and investment, and cities cannot solve them in isolation.

In conclusion, the Sustainable Cities Index serves as a tool for measuring progress, identifying areas for improvement, and fostering collaboration. As we move forward, it is essential to build upon the successes and address the challenges with urgency and determination. Only through collective action can we create sustainable cities that thrive and contribute to the achievement of the SDGs, ensuring a better future for all.

Recommendations

After analyzing this year's SCI data, with an eye toward the 2030 deadline for the SDGs, we see six action areas upon which all cities should focus to drive accelerated progress towards these global goals.



To effectively address the impacts of climate change and extreme weather events, cities must prioritize multi-purpose infrastructure solutions that serve diverse community needs. Embracing nature-positive approaches is essential for paving the way toward a more sustainable future, acknowledging the vital interplay between our communities, the natural environment, and our built infrastructure.

Roni Dietz
Global Director Climate Adaptation

Recommendation 1

Adapting to climate change impacts

Cities face escalating threats from the impacts of climate change and extreme weather events, necessitating urgent action to bolster resilience and mitigate risks. Prioritizing robust disaster resilience plans, cities should focus on sustainable building design, integrated and multipurpose infrastructure, and balancing both green or nature-based solutions with traditional infrastructure like dams, levees, and dikes.

Moreover, cities can enhance resilience against climate change and weather-related impacts by prioritizing several key measures. First, they should integrate climate change considerations into infrastructure planning, such as stormwater management systems and flood barriers, to withstand climate-related risks. Additionally, promoting urban green spaces can improve air quality, mitigate urban heat island effects, and reduce the risk of heat-related illnesses during heatwaves. This is a key area that 'cities lacking momentum' and 'cities with early momentum' can make progress on.

Enforcing stringent building codes that prioritize climate resilience for new constructions and renovations is also crucial. Lastly, greater collaboration between the public and private sectors is pivotal for developing comprehensive strategies for investing in and protecting communities and infrastructure. Critically, city authorities should keep in mind that engaging communities in climate adaptation planning fosters resilience and empowers citizens to take proactive measures to protect their neighborhoods.

Adapting to climate change impacts / Case study:

The Milestone Reservoir

Related SDGs:

Just outside Washington D.C., Loudoun County, Virginia faces water supply challenges due to its fast-growing population and reliance on the Potomac River. To address this, Arcadis is partnering with Loudoun Water on a pioneering project. We're converting a retired rock quarry into the Milestone Reservoir, capable of storing one billion gallons of water, ensuring up to two months of supply for residents.

This innovative solution enhances water resilience, mitigating risks during droughts or emergencies. With a new pumping station and withdrawal tunnels, the reservoir will optimize water quality and treatment flexibility. Recognized with a $10 million grant from FEMA, this project sets a precedent for securing clean drinking water and ensuring climate resilience in the region.

Read more on Arcadis.com →

Adapting to climate change impacts / Case study:

Enhancing Toronto's stormwater infrastructure

Related SDGs:

The people living in the City of Toronto recognize the increased frequency and severity of storms due to climate change. Residents and businesses have experienced basement flooding, which has led to property damage and operational difficulties. In response, the city established the Basement Flood Protection Program.

Arcadis is playing a key role in this initiative by providing design, engineering, and construction services in the northern district of Etobicoke. Over a five-year period, the existing 1950s-era infrastructure will be upgraded to incorporate energy-efficient measures while minimizing disruption to residents and the natural landscape.

By implementing engineering design solutions, the project aims to significantly reduce the risk of flooding and its adverse effects on the area. The primary objective is to protect the community from urban flooding, ensuring the reliability of the water and wastewater infrastructure.

Read more from Arcadis.com →

It's critical that we move forward rapidly with the energy transition in cities. Despite progress that's been made over the past decade, our cities still rely too much on fossil fuels and not nearly enough on renewable sources. From a technical standpoint, the energy transition is not so difficult. The most challenging bit is fostering broad-based, multilayered collaboration between the public and private sectors, which is necessary to make the transition a reality. But here in Amsterdam, where I live, we have shown that this is possible when all of a city's stakeholders are aligned around the same mission: making the city much more sustainable by 2030.

Carolien Gehrels
Global Director Energy Transition

Recommendation 2

Transitioning to renewable energy sources

Accelerating the shift to renewable energy sources is crucial to reduce carbon emissions and combat climate change. Despite the great progress that has been made in the past by 'cities with sustained momentum' and 'cities with falling momentum', renewable energy initiatives can always be advanced and improved. Cities should invest in low-carbon infrastructure, such as smart local energy systems that use advanced technology to generate, store, and manage energy efficiently.

Encouraging the adoption of electric vehicles and implementing policies to incentivize renewable energy production can expedite this transition. Collaborative partnerships between governments, businesses, and communities are essential to drive innovation and scale up renewable energy initiatives, paving the way for a sustainable energy future.

Expanding the energy efficiency of buildings, transportation, and industries, enhancing public transportation networks, and spurring on the use of electric vehicles are all essential for reducing a city's demand for energy, which is also an important piece of the energy transition. These measures will contribute to reducing greenhouse gas emissions and establishing a more sustainable energy landscape for the future.

Transitioning to renewable energy sources / Case study:

Johan Cruijff ArenA's solar panel array

Related SDGs:

Amsterdam's Johan Cruijff ArenA is home to the city's world-famous football club: Ajax. In 2010, a project was launched to transform the stadium into one of the world's leading examples of sustainability and the use of renewable energy.

As part of this effort, Arcadis experts helped design and manage the installation of a massive solar panel array around the entire roof of the stadium. The array now generates enough electricity each year to power around 270 Dutch households, preventing 430 tons of CO2 from entering the atmosphere.

Read more from Arcadis.com →

Transitioning to renewable energy sources / Case study:

Wallbox's EV charger plant in Texas

Related SDGs:

More than 136 million Americans live in places with unhealthy levels of air pollution. Vehicle exhaust fumes are a major contributor to this, making the transition to electric vehicles across the US a priority. However, the country's scarcity of charging infrastructure is delaying progress.

Arcadis partnered with Wallbox to design and build their first EV charger manufacturing facility in the US. This facility is now up and running and is not only expected to deliver more than 500,000 charging units each year, "but it has also created green jobs in Arlington, Texas.

Read more from Arcadis.com →

We all know that cities need to decarbonize. That almost goes without saying. But as a city makes progress on this front, it's critical that it does so in ways that are respectful of its cultural and historical identity. In this way, a city can maintain the essential characteristics that make its citizens feel they belong there. In the end, we must not lose sight of the reason we so urgently need to make this change: improving quality of life.

Marjolijn Versteegden
Global Director Smart Sustainable Buildings

Recommendation 3

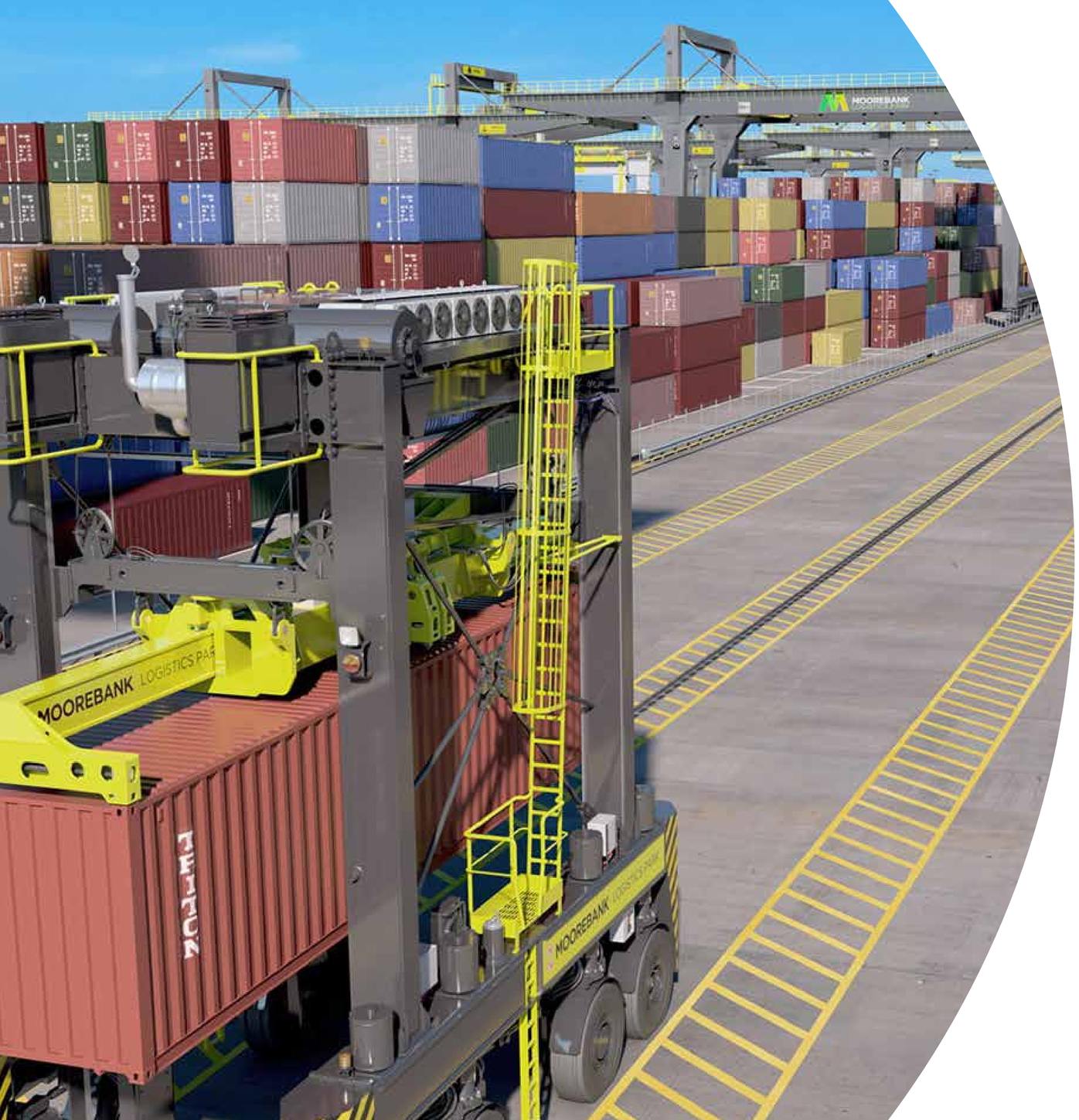
Decarbonizing homes, facilities, and industries

Cities play a critical role in achieving significant reductions in greenhouse gas emissions by incentivizing efforts to decarbonize homes, facilities, and industries. To achieve carbon neutrality, municipalities should leverage their regulatory powers to prioritize energy efficiency measures, such as implementing building codes and stimulating innovations for retrofitting structures with sustainable technologies. They should also remove any regulatory barriers standing in the way of decarbonization.

The goal is to create a regulatory environment in which everyone (individual homeowners, asset management companies, and businesses of all kinds) can clearly see that decarbonization efforts are not only the right thing to do for the world but also from an economic standpoint. 'Cities lacking momentum' should look to 'cities with sustained momentum' to learn from the successful initiatives and policies they have in place to support collaboration.

Encouraging industries to adopt sustainable practices, like recycling and waste reduction, can help minimize their carbon footprint. Supporting the development and adoption of clean technologies, such as carbon capture and storage, is also crucial for reducing emissions. Additionally, cities themselves own and operate many buildings. As such, they should be investing in renewable heating and cooling systems in their building stock.

The use of digital solutions, such as AI, has the potential to help with these efforts, but they must be employed carefully given that they can also significantly contribute to carbon emissions. The key is to strike the right balance between innovation and adaptation.



Decarbonizing homes, facilities, and industries / Case study:

Shaping a sustainable future in logistics

Related SDGs:

As the largest logistics park in Australia, Moorebank Intermodal Precinct offers a great example of decarbonization efforts in infrastructure. It has been designed to revolutionize the transport and handling of freight by shifting the focus from road to rail, helping Australia reduce transport-related emissions. From construction to operation, the project's carbon footprint has been minimized, for example, by using solar power to generate more than half the precinct's energy requirements.

The benefits for both the community and environment are huge, with detailed modeling resulting in significant traffic reduction, increased safety, improved air quality, reduced noise and vibration, and the removal of an estimated 2.8 million tons of carbon emissions over the lifetime of the project.

Read more from Arcadis.com →

Decarbonizing homes, facilities, and industries / Case study:

The Urban Woods in Delft

Related SDGs:

Rapid urbanization means cities need even more buildings, so green design and construction will be critical to ensuring cities grow in a sustainable way. Action must be taken to cut new construction carbon emissions, with certain building materials – such as cement – having a large carbon footprint. In the Dutch City of Delft, the Urban Woods apartment complex is being built with a wooden core, which drastically reduces the building's embodied carbon.

The Urban Woods will start its lifecycle with negative CO2 emissions. Through its wooden structure, solar panels, smart sensors, insulation, and subsequent 60% reduction in water usage, the complex will have a relatively small environmental footprint. The building also offers a new rental concept with a subscription model.

Read more from Arcadis.com →

Transport equity and climate solutions are not mutually exclusive. We need to ensure that people are not disadvantaged by transport access to services like health, education, and work, while still operating within the constraints of the planet. This means we can use new transport technologies to provide access to services through low-cost and low-emission solutions, such as cycleways and e-bikes, or through more efficient use of electric transit powered by digital solutions like Demand Responsive Transport (DRT). This new technology can also be used at airports around the world to help people and goods get to and from the airports, as well as using e-mobility solutions airside. In the future, we may also see electric and hybrid aircraft, which will further reduce emissions.

Simon Swan
Global Director for New Mobility & Airport Hubs

Recommendation 4

Enhancing mobility infrastructure and modes of transportation

Mobility is a critical aspect of the quality of life in cities and analysis of the SCI data reveals that the quality of transport infrastructure is a major sustainability driver. Mobility is pivotal for city life, with transport infrastructure playing a significant role in sustainability. It influences environmental health, social fairness, and economic prosperity, making investment in sustainable transport imperative for SDG attainment within 2,000 days.

Cities must prioritize enhancing public transportation networks, offering accessible, efficient, and eco-friendly options like buses, trams, and trains. Promoting walking and cycling through pedestrian-friendly infrastructure reduces congestion and enhances public health. This is a key area that those ‘cities lacking momentum’ could develop to drive progress.

Encouraging the use of low-carbon vehicles, such as electric buses and cars, is vital for curbing emissions and combating climate change. Providing incentives like subsidies and tax breaks, alongside developing charging infrastructure, can support this transition.

Implementing smart transport systems with technologies like intelligent traffic management and real-time monitoring optimizes traffic flow, enhances safety, and minimizes environmental impacts. Additionally, by leveraging digital solutions, cities can introduce Mobility-as-a-Service (MaaS) platforms, streamlining multimodal journeys and promoting sustainable transport choices. MaaS platforms enable users to plan, book, and pay for multimodal journeys, encouraging the shift towards sustainable and efficient transport options. However, cities also need to support resilient mobility infrastructure such as Mobility Hubs, which enable people to access services in a safe way through shared transport solutions, for example, e-bike hire or carsharing clubs, and are linked to public transport options. These mobility hubs can be created in a nature-positive manner that promotes urban green spaces.

Ensuring equitable access to transport for all residents, including marginalized groups and those with disabilities, fosters inclusive and sustainable cities. Investment in expanded public transport in underserved areas and fare subsidy programs will promote social equity and accessibility.

Enhancing mobility infrastructure and modes of transportation / Case study:

Faster commutes and a greener future with TfL's Northern Line Extension

Related SDGs:

Sustainable mobility can drive progress across multiple pillars, as shown by Transport for London (TfL). In 2015, TfL embarked on a monumental project to extend the iconic Northern Line to improve connectivity across the city and rejuvenate neglected areas. With a budget of over £1 billion, the project involved the complex task of tunnelling under a densely populated city. Arcadis' role ensured seamless synchronization between engineering, tunnelling, and rail systems activities.

The Northern Line Extension cut travel times between the Battersea and Nine Elms area to the City and West End by 17 minutes – a 50% decrease. The project also stimulated the development of around 25,000 new jobs and more than 20,000 new homes.

Read more from Arcadis.com →

The long term sustainability of a city depends on it's ability to offer quality of life to all it's citizens. Quality of life does not, of course, equate to affordability but affordability is an important part of it. Cities will not long retain the broad base of citizens that they require to sustain a vibrant society and economy if those citizens do not feel that they can live their best lives there. Without that broad base of citizens, cities stop working properly, culture and community wither and the race to the bottom commences. Elements of the city may perform well for specific – often historic – reasons but such cities inevitably lose out in the long run to their more affordable, more equitable counterparts.

Peter Hogg
London City Executive and UK Cities Director

Recommendation 5

Addressing the affordability crisis in cities

Cities must prioritize addressing the affordability crisis to ensure equitable access to essential services and opportunities for all residents. This is a particular area for progress that cities at risk of stalling should focus on. The expansion of affordable housing stock in cities is a vital aspect of this work but is subject to many challenges — ranging from constraints on investment that often follow the introduction of rental controls in cities, to the extreme cost of land in markets where the private sector is the main provider. In developing their housing policies, cities need to achieve a careful balance between active participation as a developer and housing provider, and effective regulation of land markets, planning, and delivery.

Ensuring affordability in public transportation through the effective operation of networks, route expansions, and where appropriate, fare support, will be crucial for improving access to cities for all residents. Developing the economic capacity of cities through job training programs and small business support will promote growth and provide further opportunities, job creation, improved access to services, and reduced inequality. However, development should not be at the expense of existing communities and although cities will always be dynamic and subject to change, the emphasis should be on maintaining and creating inclusive and resilient communities.

If the affordability crisis is to be resolved, it will require city-specific solutions delivered by the public and private sectors working collaboratively. Cities can share expertise and solutions but ultimately, progress toward the SDGs and more equitable, resilient, and sustainable urban environments will be driven by local and national initiatives.

Addressing the affordability crisis in cities / Case study:

The New York City Housing Authority's 'State of Good Repair' challenge

Related SDGs:

Arcadis is providing construction management as agent services for several New York City Housing Authority (NYCHA) boiler and roofing replacement projects. The boiler projects will provide reliable heat and hot water services at 47 NYCHA buildings housing over 9,400 NYC residents. The roofing replacement projects will eliminate leaking and add significant insulation to the roofs at 23 NYCHA buildings housing over 4,600 NYC residents.

We are also working with the Housing Authority to establish a historical cost database across NYC public agencies, including the NYC Department of Design and Construction and NYCHA. This effort will standardize the way capital projects are budgeted, leading to more effective deployment of city funds.

Read more from Arcadis.com →

Digital technologies, when implemented with purpose, are a significant enabler for society to come together to solve problems and achieve big goals, like the SDGs. Digital twins, asset management systems, and sensors are giving us the ability to meet sustainability challenges head on. Collaborative technologies allow for a broader understanding of how digital transformation can lead toward our collective sustainability goals and provide us with constant feedback and course correction advice. Leveraging analytics and artificial intelligence introduces us to combinations of solutions that have not even been considered, while at the same time helping to reduce biases in decision making. The design, implementation, and operation of digital technologies has tremendous potential to significantly contribute to the achievement of the SDGs.

Bruno Peters
Intelligence Portfolio Sales Director – Places

Recommendation 6

Spurring on digital and technological innovation

In the race to achieve the SDGs within the remaining 2000 days, cities must harness digital and technological innovation to tackle pressing sustainability challenges and navigate the complexities of our increasingly interconnected world. From smart infrastructure and data-driven decision making to AI-powered sustainability solutions, cities can harness technology to optimize resource management, enhance resilience, and improve quality of life for residents.

Embracing digitalization enables cities to develop new ways of addressing sustainability challenges, from reducing carbon emissions to enhancing disaster resilience. The digital transformation is changing the way we understand and interact with the physical world and can contribute to achieving the SDGs.

At a macro level, large-scale asset management and decision analytics technologies are enabling asset owners to aim investments toward programs that have a higher probability of meeting their specific goals, such as achieving net zero. At a more focused level, intelligent building technologies such as networked sensors and advanced control systems can optimize operations in ways that reduce negative impacts. Moreover, technology can also play a significant role in enhancing the user experience.

Digitalization facilitates collaboration between public and private sectors, fostering partnerships to co-create and implement innovative solutions. By creating ecosystems of innovation and entrepreneurship, cities can unlock new economic opportunities while driving sustainable development. To spur digital and technological innovation, cities should prioritize investment in digital twins, open access data, and collaborations with other providers. Collaborative platforms and knowledge-sharing networks can facilitate cross-city learning and the replication of best practices to accelerate progress towards the SDGs.

As we navigate the remaining 2,000 days on the road to 2030, all cities – regardless of their current standing – must strive for progress. This roadmap will look different depending on a city's starting point, but by embracing innovation and collaboration, cities can unlock new pathways to achieve the SDGs and build resilient, inclusive, and sustainable urban centers for generations to come.

Spurring on digital and technological innovation / Case study:

Optimizing curb space in the City of Toronto with CurbIQ

Related SDGs:

To drive sustainable growth, cities must make efficient use of space. Like most cities around the world, the City of Toronto is grappling with new and shifting demands on its curb space. Disruption from rideshare companies and emerging trends in mobility are making it more important than ever to understand how curb space has been designated and what regulations apply.

By digitizing curbside regulations, Arcadis' CurbIQ™ solution helps city officials better understand how their curbs are currently working and gives them the tools to improve operations in the future. These insights drove the preparation of the City of Toronto's visionary Curbside Management Strategy, which outlines more than 50 unique potential pilot projects involving innovative parking and loading solutions.

Read more from Arcadis.com →

Methodology

The Arcadis Sustainable Cities Index 2024 builds on a legacy index first published in 2015. Now comprising of 100 global cities, the 2024 Index incorporates a range of new metrics, indicators, and cities, and measures activity across four 'pillars,' ranking each city based on the results. The four pillars are Planet, People, Profit, and Progress. The combined city-level sustainability scores for each pillar reveal the relative, cumulative performance of the selected 100 global cities.

Our approach when selecting the metrics, indicators, and pillars that underpin the SCI research was guided by the notion that cities are only truly sustainable when they have natural environments that are healthy and thriving; when local authorities support the quality of life of their communities; and when shared economic and social value is a priority.

The four pillars within the Index are each made up of metrics that provide data on specific themes. The Progress pillar was calculated using selected metrics from across the other three pillars that could be tracked over 10 years*. All metrics and all pillars are equally weighted.

Some of the metrics within the Index are available at the city level and some are only available at the country level. Each pillar has been constructed to prioritize city, state, and province-level data to ensure sufficient differentiation for cities within a given country. Some metrics are a combination of both city and country-level data across the 100 cities. In these instances, city-level data was prioritized, subject to availability.

Each metric has a unique original scale. To allow for direct comparison, each has been standardized to a score of between 0 and 1, where 0 represents the worst performance and 1 the best (taking care to transform these in cases where lower original-scale values indicate better performance, such as PM2.5 air pollution exposure). The data was adjusted for outliers to ensure measurable variability across the majority of the 100 cities.

As with almost any Index of this size, it is necessary to impute data for cities within the SCI where the primary data sources cannot provide up-to-date information. In some cases, the Index will infer city data from the national data.

**Air pollution metric tracked over a period of five years.*

Planet

Indicator name	Metrics measured
Air pollution	• Annual mean exposure to PM 2.5 air pollution
Drinking water and sanitation	• People using at least basic drinking water services • Proportion of wastewater flows safely treated
Energy	• Share of renewable energy in energy production (including nuclear) • Electricity consumption/use
Natural disaster resilience	• Direct disaster economic loss as a % of GDP • Climate hazard risk (probability and consequence of hazard)
Green spaces	• Green spaces (% of city area) • Population with access to open spaces (%)
Greenhouse gas emissions	• CO2 emissions (Mt/GDP/Capita) • Energy source and capacity (MW)
Green policy	• Commitment to climate • Emissions neutral, positive, or net-zero targets
Sustainable mobility	• EV chargers per 1,000 inhabitants • Number of shared bicycles per 100,000 cyclists • Share of newly registered EVs as a % of newly registered vehicles • Sustainable transport modes as a % of all modes
Waste management	• Waste treated as a % of total waste • Population served by municipal waste collection (%) • Food waste (household, out-of-home, retail-kg/annum)

People

Indicator name	Metrics measured
Public transport services	• Quality of transport infrastructure • Modal split % of public transport
Affordability	• Cost of living • Monthly price of 1 bedroom apartment in the city center (USD) • Standard public transport fare (% of GDP/month/capita) • Homeless per 100,000 inhabitants
Crime	• Homicide rate per 100,000 inhabitants • Theft rate per 100,000 inhabitants • Safety when taking public transport
Cultural offerings	• Public libraries per 100,000 inhabitants • Number of venues in the city center
Education	• Female educational attainment (% at least upper secondary) • PISA mean score for math, reading, and science
Health	• Life expectancy (at birth) • Infant mortality per 1,000 live births • Physicians per 1,000 inhabitants
Income inequality	• Gini coefficient
Work-life balance	• Average annual leave (days) • Average annual hours worked • Paid maternity leave (weeks) • Paid paternity leave (days)

Profit

Indicator name	Metrics measured
Access to reliable electricity	• Quality of electricity
Quality of internet	• Median mobile download speed
Ease of doing business	• Ease of doing business
Economic development	• GDP per capita • Number of publicly listed companies headquartered in the city • Total market capitalization of firms headquartered in the city ($/capita)
Income and living standards	• Change in annual wage % • Change in annual living standard (%, three-year average) • Purchasing Power (GDP/capita adjusted for PP)
Employment	• Number of job openings per tertiary educated inhabitants • Female labor force participation rate % • Unemployment rate %
Governance and digital services	• Citizen participation indices around data-enabled services
Transport infrastructure	• City connectivity • Congestion (hours lost per year) • Ride share fleet size (per 1,000 inhabitants) • Average wait time (minutes)

Progress

Indicator name	Metrics measured
Public transport services	• Quality of transport infrastructure
Education	• Female educational attainment (% at least upper secondary)
Health	• Physicians per 1,000 inhabitants
Income inequality	• Gini coefficient
Air pollution	• Annual mean exposure to PM 2.5 air pollution
Drinking water and sanitation	• People using at least basic drinking water services
Energy	• Share of renewable energy in energy production (including nuclear)
Income and living standard	• Change in annual living standard (%, three year average)
Employment	• Female labor force participation rate %

Sustainable Cities Index 2024

Overall		Planet	People	Profit	Progress
1	Amsterdam	Oslo	Paris	Amsterdam	Jakarta
2	Rotterdam	Copenhagen	Vienna	San Francisco	Kinshasa
3	Copenhagen	Berlin	Athens	Dallas	Chengdu
4	Frankfurt	London	Warsaw	Stockholm	Wuhan
5	Munich	Rotterdam	Seoul	Dublin	Guangzhou
6	Oslo	Amsterdam	Prague	Chicago	Shanghai
7	Hamburg	Frankfurt	Tokyo	Houston	Beijing
8	Berlin	Munich	Oslo	Zurich	Tianjin
9	Warsaw	Hamburg	Edinburgh	New York	Shenzhen
10	London	Edinburgh	Hamburg	Seattle	Rotterdam
11	Seoul	Brussels	Copenhagen	Toronto	Amsterdam
12	Stockholm	Stockholm	Brussels	Calgary	Athens
13	Edinburgh	Glasgow	Stockholm	Singapore	Lisbon
14	Paris	Manchester	Riga	Rotterdam	Warsaw
15	Dublin	Birmingham	Manchester	Copenhagen	Budapest
16	Vienna	Vienna	Sydney	Seoul	Wellington
17	Brussels	Antwerp	Melbourne	Los Angeles	Macau
18	Singapore	Los Angeles	Dublin	Frankfurt	Seoul
19	Shanghai	Paris	Glasgow	Vancouver	Kuala Lumpur
20	Beijing	Leeds	Madrid	Philadelphia	Berlin
21	Zurich	San Francisco	Lisbon	Hong Kong	Hanoi
22	Tokyo	New York	Perth	Munich	Bangkok
23	Glasgow	Marseille	Barcelona	Perth	Mexico City
24	Shenzhen	Rome	Shanghai	Shanghai	Munich
25	Perth	Warsaw	Leeds	Boston	Singapore

Overall		Planet	People	Profit	Progress
26	Wellington	Boston	Berlin	Phoenix	Copenhagen
27	Lisbon	Riga	Beijing	Washington	Hamburg
28	Budapest	Hong Kong	Lyon	Oslo	Perth
29	Antwerp	Lyon	London	London	Tokyo
30	Manchester	Zurich	Budapest	Atlanta	Frankfurt
31	Lyon	Barcelona	Shenzhen	Beijing	Santiago
32	Melbourne	Geneva	Guangzhou	Melbourne	Sao Paulo
33	Sydney	Seattle	Rome	Sydney	Brisbane
34	Prague	Madrid	Frankfurt	New Orleans	Antwerp
35	San Francisco	Lisbon	Birmingham	Geneva	Melbourne
36	Vancouver	Singapore	Munich	Miami	Brussels
37	Geneva	Dublin	Brisbane	Paris	Sydney
38	Brisbane	Prague	Vancouver	Shenzhen	Lyon
39	Hong Kong	Budapest	Milan	Warsaw	Glasgow
40	Birmingham	Macau	Toronto	Wellington	Edinburgh
41	Chengdu	Tokyo	Antwerp	Baltimore	Dublin
42	Macau	Seoul	Amsterdam	Hamburg	Vienna
43	Leeds	Wellington	Taipei	Taipei	Marseille
44	Wuhan	Vancouver	Rotterdam	Denver	Prague
45	Riga	Milan	Ottawa	Pittsburgh	Birmingham
46	Guangzhou	Washington	Wuhan	Edinburgh	Manchester
47	Marseille	Brisbane	Tianjin	Brisbane	London
48	New York	Chicago	Singapore	Detroit	Delhi
49	Toronto	Denver	Macau	Ottawa	Hyderabad
50	Madrid	Phoenix	Marseille	Tokyo	Leeds

Sustainable Cities Index 2024

Overall		Planet	People	Profit	Progress
51	Athens	Philadelphia	Chengdu	Tampa	Bengaluru
52	Calgary	Bogota	Zurich	Brussels	Zurich
53	Los Angeles	Atlanta	Wellington	Berlin	Geneva
54	Barcelona	Tampa	Calgary	Lyon	Lima
55	Milan	Ottawa	Geneva	Milan	Paris
56	Boston	Detroit	Istanbul	Vienna	Riga
57	Rome	Sydney	Hong Kong	Wuhan	Barcelona
58	Chicago	Melbourne	Kuala Lumpur	Guangzhou	Istanbul
59	Ottawa	Baltimore	Mumbai	Prague	Madrid
60	Seattle	Pittsburgh	Hanoi	Budapest	Rio de Janeiro
61	Tianjin	Perth	Delhi	Glasgow	Vancouver
62	Taipei	Toronto	Kolkata	Chengdu	Mumbai
63	Dallas	Calgary	Cairo	Antwerp	Ottawa
64	Philadelphia	Rio de Janeiro	Bengaluru	Marseille	San Francisco
65	Washington	Shanghai	Hyderabad	Madrid	Milan
66	Phoenix	Miami	Bangkok	Riga	Stockholm
67	Houston	Beijing	Santiago	Lisbon	Rome
68	Atlanta	Buenos Aires	Jakarta	Manchester	Kolkata
69	Kuala Lumpur	Athens	Boston	Macau	Denver
70	Denver	Dallas	Pittsburgh	Tianjin	Buenos Aires
71	Detroit	Shenzhen	Houston	Leeds	Chicago
72	Pittsburgh	Chengdu	Buenos Aires	Kuala Lumpur	New York
73	Baltimore	Mexico City	Chicago	Birmingham	Baltimore
74	Tampa	Taipei	New York	Rome	Los Angeles
75	Jakarta	Istanbul	Detroit	Barcelona	Washington

Overall		Planet	People	Profit	Progress
76	Miami	Cape Town	San Francisco	Bangkok	Philadelphia
77	Bangkok	Manila	Tampa	Athens	Hong Kong
78	New Orleans	Sao Paulo	Seattle	Mexico City	Detroit
79	Hanoi	New Orleans	Los Angeles	Santiago	Miami
80	Istanbul	Mumbai	Sao Paulo	Jakarta	Johannesburg
81	Santiago	Wuhan	Phoenix	Hanoi	Calgary
82	Mexico City	Houston	Denver	Istanbul	Pittsburgh
83	Mumbai	Bangkok	Washington	Lima	Toronto
84	Sao Paulo	Cairo	Philadelphia	Manila	Atlanta
85	Delhi	Bengaluru	Atlanta	Mumbai	Dallas
86	Buenos Aires	Santiago	Baltimore	Sao Paulo	Boston
87	Bengaluru	Lagos	Dallas	Buenos Aires	Phoenix
88	Hyderabad	Tianjin	New Orleans	Delhi	Lagos
89	Rio de Janeiro	Kuala Lumpur	Lima	Hyderabad	Tampa
90	Lima	Lima	Miami	Rio de Janeiro	New Orleans
91	Kolkata	Kolkata	Nairobi	Nairobi	Houston
92	Bogota	Guangzhou	Rio de Janeiro	Cairo	Seattle
93	Manila	Hanoi	Karachi	Johannesburg	Bogota
94	Cairo	Delhi	Manila	Bengaluru	Cape Town
95	Lagos	Hyderabad	Bogota	Kolkata	Taipei
96	Kinshasa	Nairobi	Lagos	Bogota	Oslo
97	Cape Town	Jakarta	Mexico City	Lagos	Manila
98	Nairobi	Johannesburg	Cape Town	Cape Town	Karachi
99	Johannesburg	Kinshasa	Johannesburg	Kinshasa	Nairobi
100	Karachi	Karachi	Kinshasa	Karachi	Cairo

About Arcadis

Arcadis is the world's leading company delivering data-driven sustainable design, engineering, and consultancy solutions for natural and built assets. We are more than 36,000 architects, data analysts, designers, engineers, project planners, water management, and sustainability experts, all driven by our passion for improving quality of life. As part of our commitment to accelerating a planet positive future, we work with our clients to make sustainable project choices, combining digital and human innovation, and embracing future-focused skills across the environment, energy and water, buildings, transport, and infrastructure sectors. We operate in over 30 countries, and in 2023 reported €5.0 billion in gross revenues.

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