

Oslo's international benchmark performance



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State of the city

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Executive Summary

- 1. This 3rd edition of the international review of Oslo's comparative performance in international indexes highlights the city's strong position and its improved visibility within them, despite increasing worldwide competition. Oslo's strong growth profile, quality of life, productivity and investor demand means it is punching higher above its weight and in some cases outperforming the other Nordic capitals.
- 2. Oslo has solidified its status as one of the most investable medium-sized cities worldwide. The success it is having in the current cycle at attracting domestic and international capital in real estate, infrastructure and innovation means it is now included in more rankings that track these trends, and is also improving its position in financial services.
- 3. Oslo's technology and data platform, expanding cluster of start-ups and entrepreneurs, supportive eco-system and access to funding all mean that in real business and investment terms it is being identified as an internationally important location for innovation. Indeed it is now one of the most dynamic centres of innovation for a city of its size.
- 4. Despite its impressive accomplishments around innovation, Oslo faces very intense competition from within and beyond Europe. Although some experts observe Oslo's progress, currently the city's overall global reputation for innovation lags behind the real scale of its innovation system. As others also take steps to accommodate the innovation economy, a challenge for Oslo will be to communicate the innovation story and the opportunity in Oslo.
- 5. Oslo is now performing more strongly in indexes that reflect perceptions of urban lifestyle, aesthetics and the natural environment. Familiarity with some of its vibrant neighbourhoods are driving this increased visibility which means Oslo is included in more rankings of 'cool', 'exciting', and 'high quality' cities. But its performance in larger more established quality of life indexes continues to be obscured by these indexes' bias towards measuring private rather than public services, and the needs of corporate expats rather than residents or entrepreneurs.
- 6. The social and environmental resilience of Oslo has become more widely recognised in the last 18 months of indexes, thanks to its sustainability and green economy achievements, egalitarian social model, and lower exposure to future climate dis-

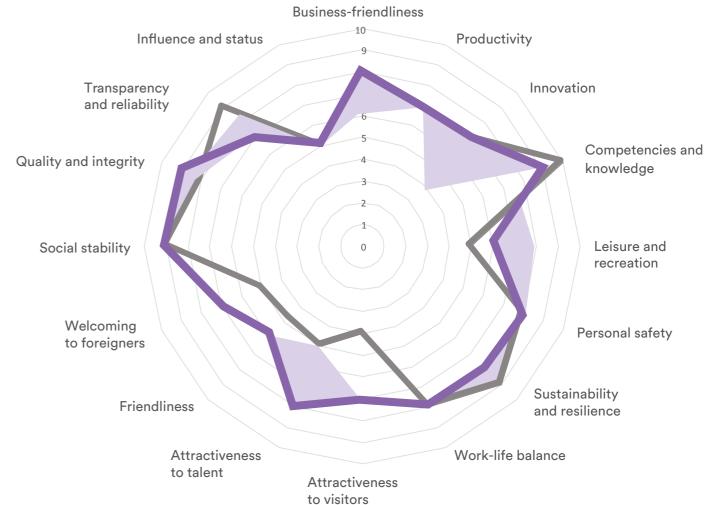
ruptors. However there are indications in some indexes that these qualities could be more widely communicated to specific audiences and sectors.

- Oslo's growth in international connectivity and the two-way traffic of tourists and talent is highlighted in several new indexes, and partly as a result it is being more widely recognised in more informal indexes that measure coastal scenery, sport, worklife balance, inspiring architecture and attractions. One big new achievement is its excellent scores for migrant cultural integration and social inclusion, where Oslo has the credentials to become seen as a world leader because of its wide range of public programmes.
- 8. Oslo's infrastructure and technology assets continue to rate as world class, but high demand means that congestion has become relatively worse, while new measures that explore shared transport suggest that the city can improve further.
- One reputational risk for Oslo during this cycle of growth and success is the issue of unaffordability. The city has consistently featured near the top of lists measuring housing and lifestyle cost increases, and this is an area where brand management may need to be vigilant.

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10. Oslo's hospitality and openness does not yet form a strong part of its success in comparative rankings, although there have been signs of improvement. The city's modest performance in, or absence from, surveys and measures of city friendliness, romance, social life and storytelling, highlights the importance of patiently addressing the deficit by targeting key audiences, revealing Oslo's new edges, and leveraging its identity as a city of peace, reconciliation, tolerance and fairness.

2015 performance



2017 performance

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This report is the 3rd edition of the 'outside-in' State of the City review of Oslo in international indexes. It evaluates Oslo's performance across every international index, benchmark, ranking and comparative measure in which the city appears. From a database of more than 270 indexes and 10,000 data points, the report assesses Oslo's current performance and international reputation in 16 thematic areas within four overarching themes: Business, Liveability, Hospitality, and Governance. It includes extended analysis of Oslo's trajectory in innovation and its progress in hospitality.

The previous 'outside-in' review, published in 2016, identified that:

- Oslo is emerging into a distinctive and attractive international location for firms, investors and talent.

-Oslo is admired for its quality of life, government and stability, but its international projection and reach is less powerful. Its visibility in comparisons of successful and 'up-and-coming' cities is below where it could be.

-Oslo has not yet converted its educational and knowledge strengths into a recognised innovation platform.

This report:

- Conducts a full review and update to Oslo's index performance since the end of 2015

- Assesses whether Oslo's international projection and outreach in indices is improving, declining or stable.

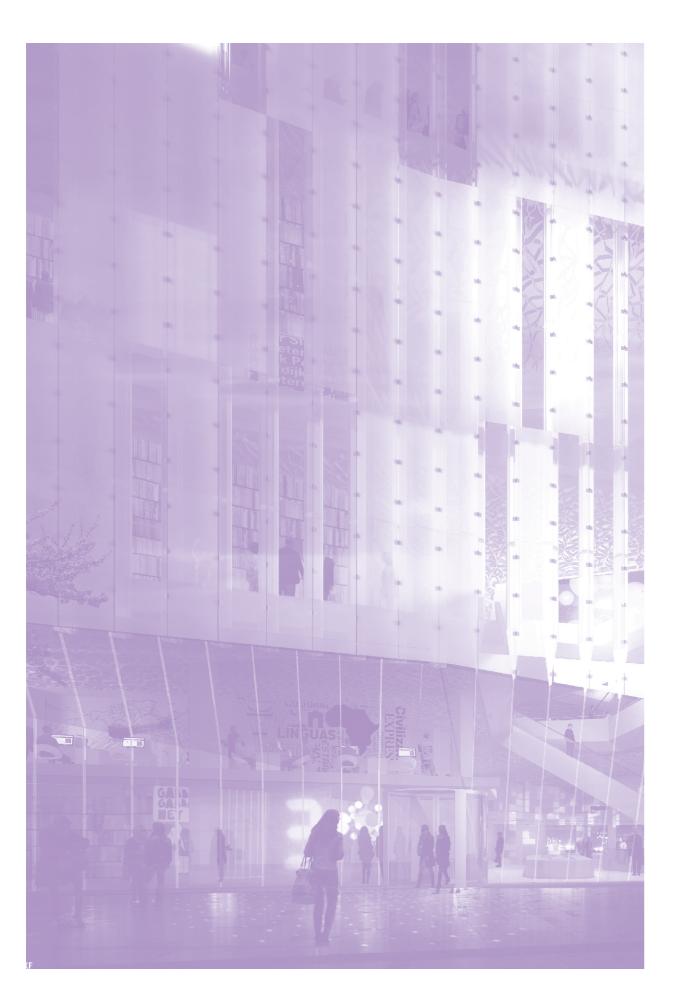
- Divides results systematically between measurable performance vs perception and analyses differences between the two for Oslo.

- Develops a Performance Spidergram and Perception Spidergram.

Explaining the 10-point scale

In the following sections, we detail Oslo's position across these 16 indicators, along a 10-point scale. Where there are sufficient indicators in both the performance and perception categories, Oslo's position will be shown twice to reflect how performance and perception compare. The scale is indicated by the horizontal colour scheme, where grey indicates weaker performance, and purple indicates stronger performance. This is explained in more detail in the method note appendix.





- Oslo has some real and perceived areas of under-performance relative to other established and higher-income cities worldwide.

Since the first review, the Oslo Region Brand Management Strategy was launched to respond to the visibility deficit and build a more compelling brand to drive activity to the city and region. The strategy's main goal is to make Oslo the world's favourite compact city, one that offers a dynamic platform for young people and pioneering companies to gain visibility, confidence and global reach. The brand strategy therefore aims to raise Oslo's profile, its real and perceived attractiveness, and its throughput of investors, workers and visitors.

> - Provides a headline analysis of Oslo's evolving position in the indexes, broken down into the key areas of interest. and continuities.

State of the city

Benchmarking Oslo against peer cities

The 2016 report placed Oslo among a peer group of 50 medium-sized, upper income, high quality cities with a global orientation, and with at least one visible specialisation.

By measures of size, GDP per capita, sector composition and internationalisation, 12 of the 49 peer cities strongly correspond to Oslo's assets across multiple dimensions (see left column). A second group of 22 cities has similar qualities to Oslo but are somewhat larger in terms of population and market size. A third group of 15 cities resembles Oslo in terms of metropolitan size but lacks the breadth and depth of assets and advantages that Oslo possesses.

By this set of measures, 12 of the 49 cities strongly correspond to Oslo's assets across multiple dimensions (see left column). There is a second group of 22 cities which have similar qualities to Oslo but are somewhat larger in terms of population and market size. Finally there is a group of 15 cities which have resembances in terms of metropolitan size but lack the breadth and depth of assets and advantages that Oslo possesses.

Austin
Basel
Brisbane
Calgary
Dublin
Glasgow
Helsinki
Ottawa
Perth
Portland
Vancouver
Zurich

Strongly comparable in most areas

Comparable global assets or strategy, but not size and scale

Comparable size and wealth, fewer similar assets or strategic imperatives

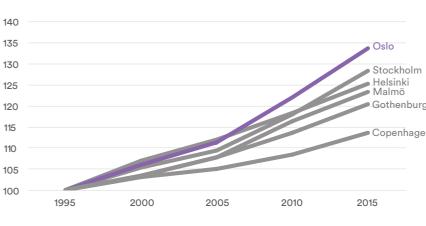
Abu Dhabi	Adelaide
Barcelona	Bristol
Berlin	Cleveland
Boston	Eindhoven
Copenhagen-Malmo	Gothenburg
Detroit	Las Vegas
Frankfurt	Lyon
Hamburg	Manchester
Kuwait City	Marseille
Melbourne	Minneapolis
Montreal	New Orleans
Munich	Orlando
Rome	Prague
San Diego	Raleigh
San Francisco	San Jose
Seattle	
Stockholm	
Stuttgart	
Sydney	
Tel Aviv	
Vienna	
Warsaw	

Out of these 50 cities, Oslo is the 16th highest ranked city across all indexes in which they are measured. Its average position globally is 34th, reflecting the increasing sample size in city indexes and rising competition between cities. Berlin is the highest ranked peer city with an average global position of 21st. With a wide lens, Oslo's position is broadly comparable to Helsinki and Seattle, and continues to record a strong position in international benchmarks despite increasing competition.

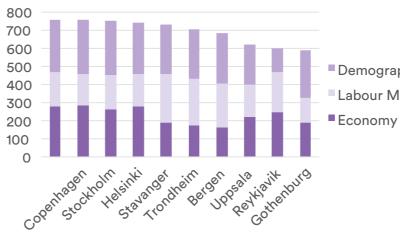
Oslo among the Nordic capitals

In the context of its region, Oslo's economy is highly dynamic and its outlook is consistently improving. Based on the long-term pattern and future forecast, the city's demographic and economic fundamentals place it 1st in the Nordregio Regional Economic Potential Index, ahead of Stockholm and Helsinki.¹

Table 1: **Population of Nordic regions, 1995-2015 (1995 = 100)**



Oslo's aggregate performance in the **2016 Regional Potential Index**



SOURCE: NORDREGIC

SOURCE: NORDREGIC

Demographics Labour Market

As this paper shows Oslo is steadily improving its international performance, but it is still on average some way behind the three larger Nordic capitals, and in particular behind Stockholm and Copenhagen. However, Oslo is the lead Nordic capital in six indexes - up from two last year, which includes the UBS net Annual Income Survey, the Glassdoor Cost of Living measure, Knight Frank's Global Residential Cities Index, the JLL Investment Intensity Index, the Nordregio Regional Potential Index, and the UN City Prosperity Index. Oslo's quality of life, productivity and investor demand allows it to punch above its weight in global city indexes.

No. of indexes in which each city leads the rest (where minimum 3 of the 5 cities are ranked)

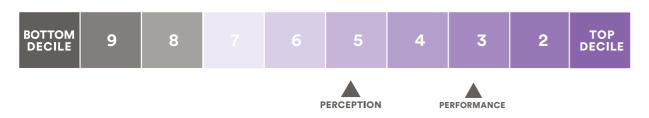
No. of index rankings

Copenhagen	24
Stockholm	23
Oslo	6
Helsinki	5
Reykjavik	0



Business climate

2.1 Business friendliness



The 2015-16 review found that:

Oslo's business friendliness performance has been on the up, because of improvements to regulatory frameworks, relocation costs and the way companies are supported.

Since 2015

- Oslo's economic diversification and demographic growth are helping it to solidify its position as one of the most investable medium-sized cities worldwide. The latest JLL Investment Intensity Index places it in 1st position, surpassing its 2014 high. This is a major achievement Oslo also appeared for the first time on ULI's flagship ranking of European real estate markets, ranking an impressive 12th of 30.3 The city is highly attractive to international investors, especially real estate investors, because of strong demand and market transparency.² It benefits substantially from high

- Oslo's reputation among financial services decision-makers has markedly improved since 2015. It has climbed 23 places to 44th in the main global index, comparable to its Nordic neighbours.4

- Oslo's business climate continues to be challenged by dynamic global competition. The IESE Cities in Motion Index measure of entrepreneurial dynamism and ease of starting a business has seen Oslo fall slightly since 2014, from the top 10% to top 15% globally. La Salle's most recent European index on business growth potential, also saw Oslo decline by four places since 2015.5

access to business finance. However office rents have become relatively more expensive and its reputation for financial services slipped partly due to the rise of financial centres in the East.

-Business costs in Oslo remain relatively high, while the national availability and affordability of loans has slightly declined. But access to venture capital, overall tax rate on profits and business start-up times have stayed steady or improved since the last edition of the WEF Global Competitiveness Report, maintaining Oslo and Norway's position near the top of their peer group.6

- Oslo's size constraints means it is not an essential business destination for global consumer industries - it ranks only 138th of 190 in 2016 for global retailer coverage, a drop of 7 positions.7

2.2 Productivity and efficiency



The 2015-16 review found that:

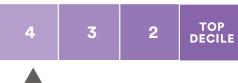
- Oslo ranked highly on productivity measures that focus on per capita GDP and employment, but less highly on broader measures of travel-to-work, goods and trade efficiency.

- The city's recent improvements to its digital and technology platform were reflected in some improvements in international rankings.8

Since the last review:

- Oslo's infrastructure and technology assets continue to rate as world class. The 2016 edition of the Networked Society Index maintains Oslo's position of 8th of 41 cities for broadband maturity, ICT costs, and modern technology. The city also ranked 37th globally by IESE for the quality of its broadband and technology platform, up 7 places, and also improved 13 places for transport, placing it 9th in its peer group. Oslo is one of the only cities

of its kind to have made substantial progress on both the technology and infrastructure pillars of productivity.9 - Congestion has become an increasing competitive concern for Oslo. TomTom's Traffic Index measures Oslo as the 25th least congested city of 39 in its peer group, a drop of 11 positions on 2016. Meanwhile the INRIX global traffic scorecard records Oslo as having become significantly more congested, in relative terms, since 2015, especially during periods of peak demand. Although by the standards of the larger global cities congestion is still fairly low, it has fallen behind other Nordic capitals in this area. Meanwhile the city's takeup of shared mobility, an important aspect of workday efficiency, is only average, at 28th of 52 cities globally, because of the limited scale of its shared transport infrastructure (e.g. bikes, cars), and its low-to-medium density.10



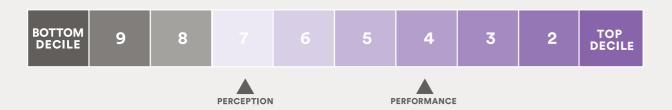
PERFORMANCE

Oslo continues to boast one of the lowest unemployment rates of its European peer group (9th of 24) - an important component of labour market indexes. This underlines the continuing strength of the economy even in the face of increasing global competition.11

2.3 Special feature on Oslo Innovation performance and global perception

Oslo has a fast-maturing eco-system for innovation, home not just to anchor firms and investors but to hundreds of start-ups, more than 50 incubators and accelerators, as well as nearly 30 recognised co-working spaces.¹² The city's innovation edges are very distinctive given the sector specialisations, collaborative working culture and appetite of public and private sectors that Oslo possesses.

Yet as we know, other cities are also seeking to make their own adjustments to accommodate a larger slice of the innovation economy. In this section we look in depth at Oslo's progress from a comparative perspective.



The 2015-16 review found that:

Oslo's high share of high-tech employment has helped the city gain recognition alongside larger centres of innovation, although the number of patents had only increased slightly. In a major index on creative cities, Oslo was ranked among the top cities globally for its high-tech capabilities and entrepreneurship.¹³

The city's scoring in innovation indexes has benefited from an increasingly young working age population.

The number of scientists and engineers at the national level was considered to be at a competitive level globally.

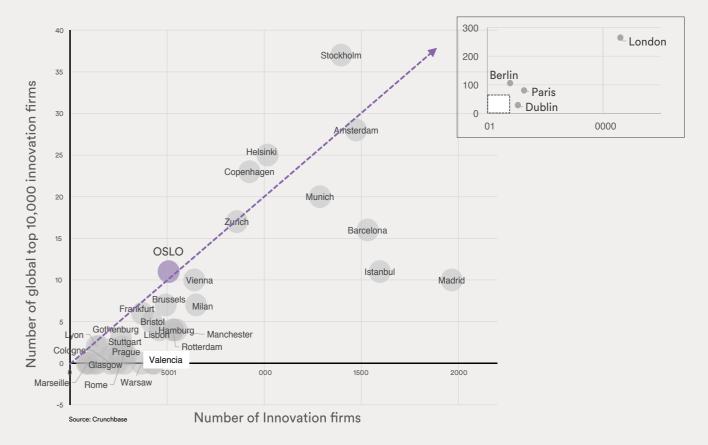
Since the last review:

Oslo is gaining recognition as an internationally significant innovation location. It featured as one of the 25 top start up hubs in the world, primarily thanks to its high digital technology adoption rates, expanding sense of entrepreneurialism, ease of doing business and its approach to work-life balance.¹⁴ It also ranked 25th of 80 cities (15th of 27 peers) for active startups seeking funding in the Most Inspiring Cities ranking, ahead of Melbourne, Dubai and Rotterdam.¹⁵

Oslo's recent success at accommodating and nurturing innovation has been extensively covered by The Nordic Web. It observes that Norway is home to the second fastest growing number of investments in the Nordic tech scene, with a year on year growth of 160% - just behind Sweden's 171%. Starting from just nine investment deals in 2014, by 2016 this had surged to 78, 57 of which were agreed in Oslo, totalling well over \$106m. Norway is forecast to attract over 100 investments in 2017 (the vast majority in Oslo), potentially overtaking Finland which until now has had a more well-known tech scene internationally. Strong growth in venture capital funding in Oslo's innovation economy is set to see the number of active firms in innovation sectors expand rapidly.¹⁶

Analysis from Crunchbase illustrates that Oslo is at the front of a chasing pack of European cities that lead globally for innovative firm activity. With over 500 innovation-based firms identified in the Oslo region, Oslo outperforms the likes of Brussels, Frankfurt, Warsaw and Gothenburg. It is also home to 11 of the global top 10,000 ranked innovation companies, which is higher than the vast majority of European cities, including Vienna, Manchester and Madrid.⁷⁷

Innovation activity in European cities



When compared to population size, Oslo region emerges as one of the top 10 most innovation-intense regions in Europe, ahead of highly regarded innovation economies such as Barcelona, Paris, Munich and Lisbon.

Top 20 European regions for innovation firm intensity (firms per million population)

		No. of innovative firms	Regional popu- lation	Innovation intensity
1	Dublin	2636	1.7	1551
2	London	11503	10.5	1096
3	Amsterdam	1473	2.7	546
4	Zurich	859	1.6	537
5	Copenhagen	924	1.8	513
6	Helsinki	1017	2.2	462
7	Berlin	1963	4.5	436
8	Stockholm	1396	3.5	399
9	Bristol	421	1.1	383
10	Oslo	508	1.5	339
11	Hamburg	549	1.8	305
12	Madrid	1965	6.5	302
13	Barcelona	1532	5.3	289
14	Paris	3174	12.5	254
15	Munich	1287	5.2	248
16	Sofia	282	1.2	235
17	Prague	291	1.3	224
18	Lisbon	461	2.1	220
19	Cologne	209	1.1	199
20	Newcastle	211	1.1	192

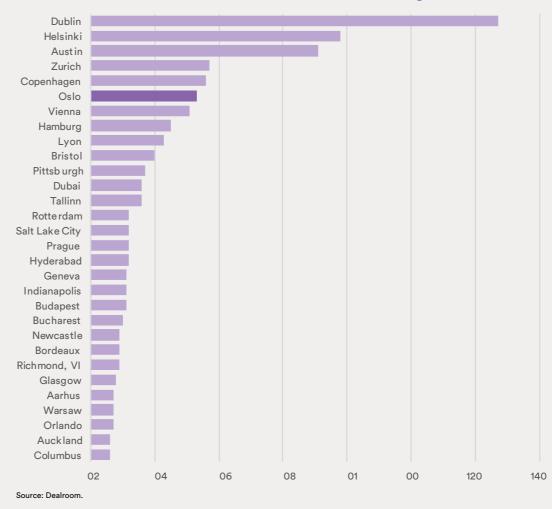
Source: Crunchbase, Based on figures from March 2017.

As of March 2017, further Dealroom data shows that Oslo is home to 3 innovation firms with more than 5,000 employees (Visma, SpareBank, Schibsted Media), and a further 6 employing more than 1,000 employees. 33 of these firms have received over 1 million euros of funding to date. In 2016 as a whole, Oslo received €79m in funding for its leading firms - comparable to Helsinki.18

On this basis, Oslo's innovation economy emerges as highly competitive. Among all medium-sized cities in the world (<2 million metropolitan population), Oslo ranks 6th for the number of innovation companies it hosts that have received more than 1 million euros of investment so far. The only cities ahead of it are global leaders such as Dublin, Austin and Zurich, while it is ahead of promising innovation-friendly cities such as Vienna, Hamburg, Pittsburgh, Dubai, Tallinn, Hyderabad and Auckland.

Most attractive medium-sized cities globally for start-up investment

Number of firms that have received more than €1m funding



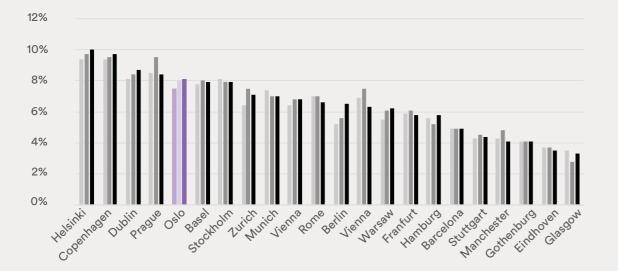
What are the drivers of Oslo's innovation eco-system growth?

Oslo's innovation system is clearly underpinned by its strengths in banking/fintech, medtech, design and creative industries. In international indexes, it is apparent that demand for innovation in Oslo is also partly fuelled by its increasing visibility as a smart city. Oslo was found to be in the global top 5 of

Smart Cities - just behind Barcelona and San Francisco among its peers. Among 40 metrics related to technology, transport, energy, open data and economy, Oslo's strengths in smart infrastructure and energy helped push it towards the top.¹⁹ High quality tech infrastructure and access to data are important factors that incentivise start-ups to base themselves in Oslo.

Oslo's consistently high employment in high technology sectors, at over 8% of the total workforce, secures its position among the elite in Europe, especially as many cities have seen this share drop since 2014.20

Employment in high-tech sector in European peer regions, as % of total jobs



- At the national level, Norway's position as an innovation economy remains strong and has slowly improved, climbing from 15th globally to 12th. Areas of significant improvement include its capacity for innovation and company spending on R&D, with steady or slow improvements in availability of scientists and PCT patent applications (both in the global top 15).²¹

Translating promising performance into a powerful innovation brand. Oslo's strong performance and innovation intensity is only just beginning to be reflected in measures of international perception.

-A ranking of European cities' reputation for innovation in the eyes of start-up founders – the Start-up Heat Map - saw Oslo come in 23rd of 30 European cities, 13th of 16 peers. The city is fairly highly regarded by entrepreneurs in the Nordics (=10th in Europe), but it is not widely recognised in the Benelux countries (=23rd), the UK and Ireland (=26th), and Central and Eastern Europe (=22nd). Cities which on paper possess fewer assets and a less dynamic eco-system are more visible than Oslo - including Tallinn, Warsaw, Budapest and Riga.23

-Oslo was also not included in the European Digital Cities Index despite its strong assets, whereas 20 of its peers are, including Stockholm, Helsinki and Copenhagen.

group of 49.22

This evidence indicates that while the activity on the ground is very exciting, there remains a strong challenge to communicate the rate of change taking place in Oslo.

Summary of Innovation for Oslo

- Oslo remains among the leading small and medium

sized cities for innovation outside North America, but its

position has declined slightly on 2thinknow's measure of

innovation performance, from 16th to 18th among its peer

The signs and the data are all pointing in the direction that suggest that Oslo can become established as one of Europe's top ten innovation hubs in the not too distant future. As other cities have shown, marketing and promotion is an essential piece of Oslo's innovation jigsaw. By continuing to coordinate a clear message across multiple markets, and to leverage the city's distinct DNA and tell a compelling story, Oslo is very likely to continue to grow its appeal for talent, investors and companies participating in the innovation economy. At the same time Oslo will likely require the cultivation of several neighbourhoods with authentic character and profile, rich diversity, critical mass and the right tactics to communicate the story of change effectively.

2.4 Competencies and knowledge

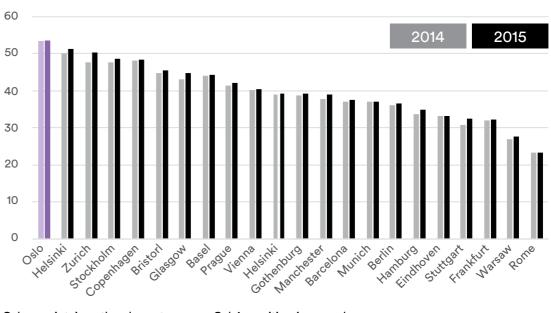
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The 2015-16 review found that:

Oslo's educational attainment and inclusion has improved in most measures, and is at the top of its European peer group, behind only Inner London. The city ranks very highly in terms of education investment and scientific knowledge.

The city does not always per well in talent and human cap measures because of weighti favour the number of internation workers and students.

Tertiary education attainment among 25-64 year olds in NUTS2 regions.²⁵



Oslo maintains the lowest percentage of young people neither in employment nor in education and training in Europe (4.7%), indicative of the continuing health of its labour market and education system.²⁶

Oslo's position in some human capital measures has declined significantly due to a shift towards measuring absolute rather than per capita figures - as a result, it is ranked 29th of 32 peers in one major study.27



Since 2016:

rform	Oslo continues to excel for its share
oital	of university-educated residents (54%
tings that	of over 25s), which is higher than
ational	almost any other global region.24



Quality of life

Oslo continues to perform strongly for perceptions of quality of life, with very high citizen satisfaction, and a strong reputation as a place to live among audiences in Western Europe, except when surveys place a clear emphasis on factors such ascost of living and climate. But in major quality of life indices that rely on data, Oslo's success continues to be obscured by the focus on private rather than public services, and on expatriate rather than resident needs.²⁸



3.2 Personal safety



The 2015-16 review found that:

Since the last review:

Oslo's 'stability' ratings and percep-
tions of safety remained consistentlyImproved
maintain
on Merce
of merce vas still rated in the middle
of international cities, on a par with
Montreal and Barcelona.Improved
maintain
on Merce
remains

Improved safety is a factor in Oslo maintaining its steady position on Mercer's annual quality of life ranking at 31st in 2017, which remains below its high position of 24th achieved in 2010.

3.1 Leisure and recreation



The 2015-16 review found that:

Since the last review:

Oslo's symphony, opera, museum and ballet were highly rated, placing it at the top of its peer group. Improvements to the city waterfront and public spaces are an important reason why qualitative reviews of liveability ranked Oslo among their top cities.

Oslo is penalised in some measures of quality of life because of aspects to do with size and location that are not easy to address (e.g. climate, number of cultural attractions).

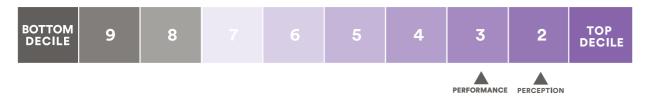
ies the last leview:

Oslo is now performing more strongly in indexes that reflect perceptions of urban lifestyles. The city ranks 7th in a global top 10 of high quality of life cities according to Metropolis Mag, thanks to its proximity to nature, diversifying architectural charm (e.g. the Astrup Fearnley Museum), and the transformation of its waterfront into a vibrant mixeduse area. The recognition of vibrant neighbourhoods such as Grunerlokka, with a strong culinary and recre ation offer, means Oslo is ranked 7th in a list of "hip" neighbourhoods in the world, among a list of 20 cities.²⁹



An important recent safety index found that Oslo was the 17th safest of 43 peer cities in terms of crime, and 124th globally (of 342). While crime remains low by global standards, Oslo's performance is not quite outstanding compared to central European or Canadian cities.³⁰

3.3 Sustainability and resilience



The 2015-16 review found that:

Since the last review:

Oslo's environmental performance remains at the top of its peer group and world-class globally, despite challenges associated with congestion and car use.

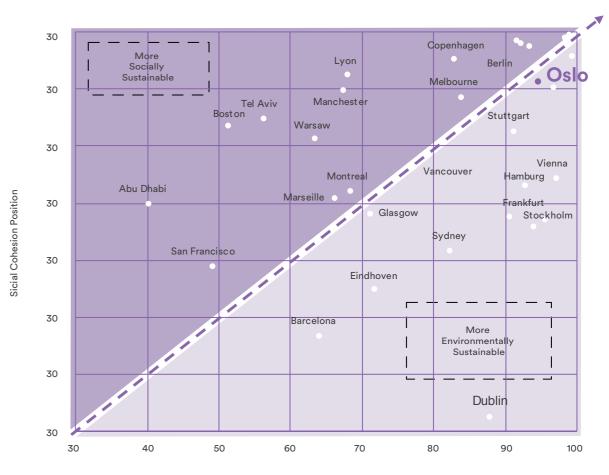
risk cities in the world thanks to low levels of inequality and exposure to natural disasters, in an important new comparative study by IGAR-APE. A similar study by Lloyds found that Oslo was 106th of 331 cities globally for its economy's exposure to risk, rated more secure than many peer cities.³¹

Oslo was rated one of the least at-

Oslo's excellence in terms of pollution and emissions was confirmed in two additional indexes. Numbeo ranked Oslo as the 18th least polluted city globally (of over 200), while IESE rank Oslo 10th (and 7th among 32 peers) in terms of low CO₂ and other pollutants, a slight fall from the previous year mainly due to a wider number of comparator cities.32



Oslo remains at the top of social and environmental sustainability assessments. Source: IESE.



Environmental Sustainability Position

NB: Position in each category determined by converting ranks into percentile positions, where 100 = best.

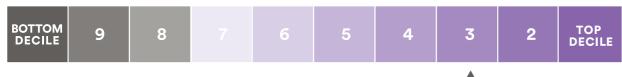
A new measure on perceptions of city performance in the green economy, notably in relation to climate change leadership, efficiency sectors, markets and investment, ranked Oslo a highly impressive 4th of 50 global cities.³³

New indexes have started to measure the sustainability practices of city industries and businesses, and this may require increased vigilance for Oslo. The city performs weakly in a new Global Destination Sustainability Index that measures the sustainability practices of hotels, ven-

ues and convention bureaux. It only ranks 18th of 34 cities, due to limited sustainability certifications of buildings and businesses in the industry, and a lack of MICE Industry promotion of the city's sustainability offer compared to cities such as Barcelona and Melbourne.34



3.4 Work-life balance



PERFORMANCE

The 2015-16 review found that:

Oslo's disposable income had im- Oslo's unaffordability continues proved in two measures of spending to overshadow its perception for power.

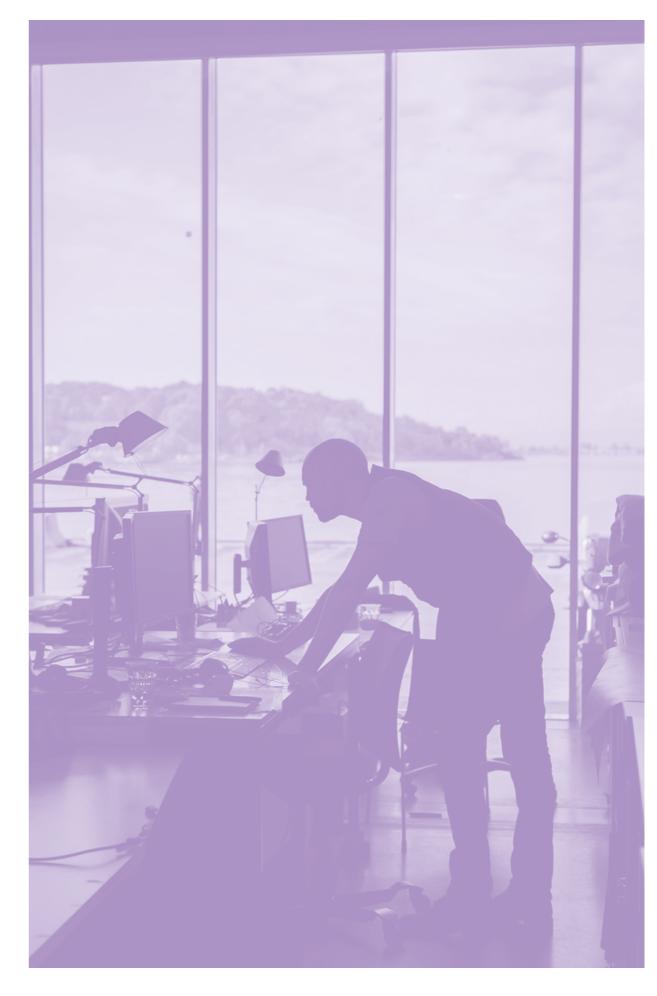
The share of public transport commuters had grown both relatively and absolutely. Oslo is increasingly measured as a high quality public highlights the risk of inflation to transport city.

Since 2015:

positive work-life balance. The Knight Frank Global Residential Cities Index rates Oslo 2nd for house price increases in its peer group - behind only Vancouver - which work-life balance.35

Glassdoor's cost of living survey highlights high total living costs (including rent) in Oslo, 4th internationally and 3rd among its peer group after Geneva and Zurich. However Mercer's latest cost of living survey finds that Oslo is now only the $11^{\rm th}$ most expensive city among its peer group, a significant improvement since 2014.36

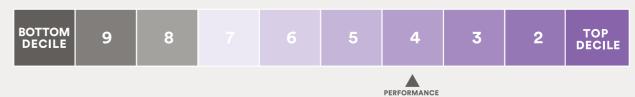
State of the city





Special feature on Oslo's Hospitality

4.1 Attractiveness to visitors (attractions, landmarks, shopping, food, events)



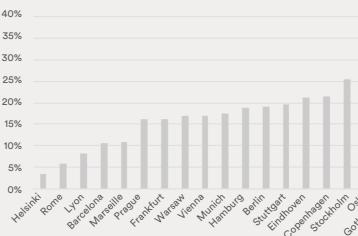
The 2015-16 review found that:

Since 2015:

Oslo improved its international outreach in one of the key global indexes because of improved tourist and business visitor numbers, and remained stable in other measures. The city however faces increased competition to host congresses and conventions.

Oslo's cycle of tourism growth relative to other cities has continued. A surge of 30% in international arrivals at tourist accommodation since 2012 is second only to Gothenburg among peer regions in Europe. The number of passengers going through its airport is the 8th highest among its European peers, an

Change in international arrivals at tourist accommodation, 2012-15: Eurostat, NUTS 2



- Oslo is however beginning to gain recognition in formal and informal perception measures of visitor attractiveness. The city was selected as one of the top 25 coastal cities in the world by Conde Nast, and placed 29th of 80 cities for Travel Bird's assessment of themost inspiring cities for travellers, which puts it in the top 10 among its peers. In a major new city brand index by Resonance, Oslo ranked 46th of 100 cities globally, performing well in terms of the number of attractions and institutions, the city ranks only 20th among its 34 peer cities for its online and media visibility.One area where Oslo is featuring more regularly is sport: Oslo ranked 43rd of 100 in the Global Sport Cities Index (9th of 19 peer cities), partly due to its hosting of winter sports events.41

An important question for Oslo is whether the city is developing a reputation for welcome and openness. This is important because many of Oslo's advantages and specialisations require an underpinning of an open and welcoming city which is both a magnet for talent, a hub of diversity and cultural cosmopolitanism, and a social identity that is suitable to support international and innovation functions.

This imperative to achieve recognition as an 'open' city is a little challenging for Oslo for five main reasons:

Many cities are competing in this space and there is the likelihood that Oslo could simultaneously improve its performance without increased recognition and visibility.

Oslo is in a very dynamic cycle of city development but is coming from a low base in terms of global awareness of the city's amenities, character, and identity. This means there is a time-lag between the city making progress and perceptions of the city catching up, relative to other cities that are more well known and can add more easily to their existing visible character.

Oslo's location in the Nordic region brings some special challenges. On the one hand this region is better known globally for its latitude and unique natural environment, long days of darkness and perception of coldness. Additionally, Norway is strongly positioned in its visitor identity as a country of snow, fjords, Christmas trees, and northern lights. This is not a diverse urban identity and does not help to reveal Oslo's offer. Equally, other cities in the region (Stockholm and Copenhagen in particular) are coming to be seen as culturally diverse and good places to visit. This is after many years of careful positioning.

Opportunities to more rapidly develop the city's outward looking character and reveal its cosmopolitan nature to a large global audience, such as by bidding to host the Winter Olympics, have not been taken. This means that Oslo is more likely be recognised and score highly in specialist assessments rather than general perceptions.

Stereotype and ill-informed attitudes may encourage a reputational barrier with elements such as 'cold climate', 'non-membership of EU', 'gas and oil-led economy', 'high cost' region, or (largely incorrect) 'small scale' and 'closed shop' associations may also be at play. These are elements that communications strategy needs to address effectively

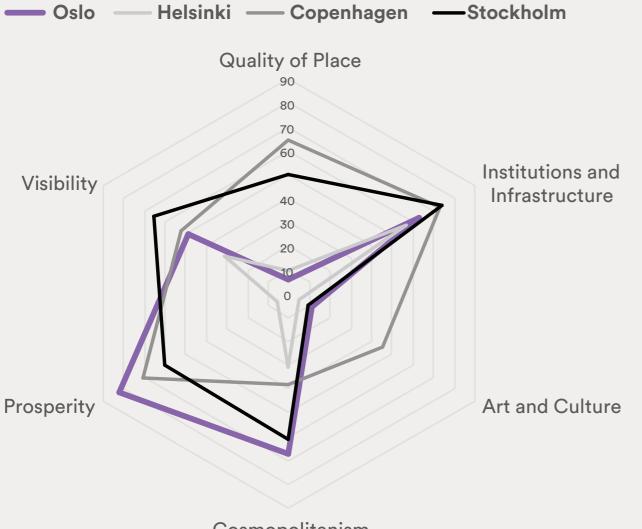
As the following section shows, Oslo's measured performance in Hospitality remains a little weaker than in the other three segments (Business, Liveability, Governance), but it is also the area that has improved the most since this report's first edition in 2015.

40%

impressive performance considering the city's size and location. This is supported by a new index on city air connectivity which ranks Oslo 31st globally by number of direct flights to other global cities.³⁷



- However these changes are not reflected in those indexes which focus on the scale of the visitor economy, rather than per capita size. Because of this, Oslo's position in IESE's "international outreach" has fallen to 18th among 32 peers. A new DHL Connectedness Index also only ranks Oslo 87th for intensity of global flows of tourists, migrants and FDI.38

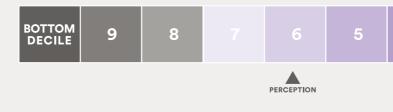


Cosmopolitanism

NB: Original labels, clockwise from top, were Place, Product, Programming, People, Prosperity and Promotion. Place refers to aesthetic appeal; Product: key institutions, attractions and infrastructure; Programming: arts, culture and entertainment; People: immigration and diversity; Prosperity: Employment, GDP per Capita and corporate head offices; Promotion: quantity of articles, references and recommendations online. Resonance's ranking system has been inverted for this graph.

Oslo's measured visitor appeal continues to be limited by its real and perceived costliness. The city featured as the one of the most unaffordable backpacking cities globally, with costs to the traveller in the most expensive global top 10.42 Despite the overall sense of progress, the competition of other cities remains strong. Oslo's omission from the 'soft power'-oriented City RepTrak index in 2016, while 23 of its peers were featured, is a reminder that Oslo's credentials of peace, cohesion and forward-thinking innovation, need to be continually reasserted.43

4.2 Attractiveness to talent



The 2015-16 review found that:

Oslo's attractiveness to workers, entrepreneurs and students continued to improve in the main indexes. The main factors driving this performance are the high rate of migration and improved recognition of its universities.

Oslo's appeal to talent is set back by a lack of profile among its leading neighbourhoods, and perceived limitations in the national framework for talented immigrants.

Since the last review:

The current trajectory for Oslo's talent attraction is improving all the time. In the Nordregio index, Oslo was rated very highly for demographic potential, based on current population density, migration patterns and female labour market participation. The Resonance city brand index assesses Oslo's cosmopolitanism to be 33rd of 100 cities, 15th of 34 in its peer group - a relatively strong performance that improves its standing as an open city. Nationally, Norway's capacity to attract talent improved two positions to 18th globally - while its capacity to retain talent is even more impressive at 4th.44

Oslo is demonstrating a capacity to appeal to new kinds of talent. In a new ranking of cities' appeal to Ultra High-Net Worth Individuals, Oslo was ranked 37th of 50 globally (13th

University Rankings in the three major global studies

	QS World University Rankings	Times Hig tion Univ
Oslo	113 (+22 places)	132 (+

The cost of relocation remains one of the most important deterrents for prospective talent. A new index of worker relocation costs finds Oslo to be the 14th most expensive city globally to relocate to (6th among its peer group, just behind Copenhagen and Sydney) in the first few months of arrival. Another major study found it to be the 14th most expensive city for expats, far ahead of most of its peer group.⁴⁹ Oslo's association with high 'barriers to entry' is an important area to address.

2



PERFORMANCE

among its peers), a good initial performance in this market.⁴⁵ The city's pull to international students benefits from its university continuing to improve in two of the three global university rankings.46

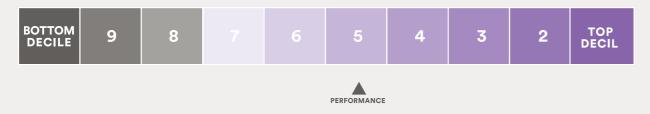
Oslo's appeal to international university students improved from 60th to 53rd between 2016 and 2017, although it remains 24th of its peer group with more improvement to make.47

There are signs that the employment opportunities for foreigners in Oslo are very highly valued and need to packaged within a broader offer or welcome. Norway featured as the 8th best country to be working abroad according to expats, with excellent work-life balance, and the 43rd best expat destination globally (the second highest ranked Nordic country after Sweden) when all lifestyle factors were taken into account.48

gher Educaersity Rankings 3 places)

Shanghai Jiao Tong 67 -9 places)

4.3 Friendliness of the people



Since 2016:

The 2015-16 review found that:

Oslo did not feature in international rankings rating city friendliness. Tolerance was rated as the weakest area of the city's appeal in one index due to its limited social, cultural and religious diversity compared to other global cities.

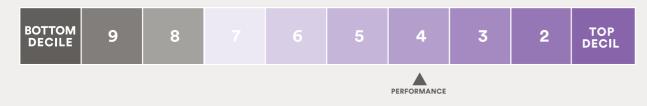
Oslo is still absent from most international rankings and surveys rating city friendliness, including those that assess openness to minorities. Indexes for example that measure LGBT friendliness tend to include Stockholm but not Oslo.50

Becoming part of social networks is viewed as an important barrier for long-term visitors and residents. Norway as a country ranks low on

expat perception surveys for ease of settling in (63rd of 67) - largely due to difficulties in socialising reported by expats. All Nordic countries feature at the bottom of this measure.⁵¹

Oslo ranked 60th of 80 cities for 'romance', comparable to cities such as Tokyo and The Hague, in an index based on internet searches.52

4.4 Welcoming to foreigners (ease to move and live here, helpfulness)



The 2015-16 review found that:

Since the last review:

Oslo's immigration profile has become increasingly recognised in the city in Europe in the new Interculdata, which will help the city's future performance in diversity and talent-related indexes. Until recently, however, a perception that Oslo is services or employment). Oslo ranks culturally homogeneous and has few extremely highly for cultural provisible minorities has affected its po- grammes, the management of pubsition in perception-based measures. lic space and public services, and

Oslo is now the highest ranked large tural Cities Index, which measures city policy for cultural integration (e.g. education, culture, access to

labour market integration, and also performs relatively well in terms of ethnically mixed neighbourhoods. Oslo beat Zurich, Copenhagen and Hamburg to top spot.53

Summary for Oslo

Overall, this 2017 assessment shows an interesting mix of both progress and challenge.

It is clear that Oslo is gaining recognition as a great place for High Net Worth individuals, international students, congress attendees and others, and that some of Oslo's amenities, neighbourhoods and character are beginning to be recognised globally.

Oslo's dynamic progress and improvements as a city would be more visible if it were not for two sets of factors. Firstly, global competition is simply very intense and many other cities are also making rapid improvements. Second, key challenges such as 'high costs' and the challenging dimensions of Nordic identity and lifestyle militate against some of Oslo's aspirations.

There are four basic strategies that make sense for Oslo in this context:

Patience and persistence should be applied to the regional positioning overall. This is going to be a 'long game' for Oslo, and confidence is needed that perceptions of Oslo will catch up with the dynamic and open reality of the city. Alongside this persistent approach here will also be moments of acceleration and these need to be curated carefully.

Targeting the key audiences that matter to Oslo's development, and influencing their sentiment, is more important than improving general comparative perceptions of the city at this point. Thus, focussing upon investors, international students, knowledge workers, and congress attendees appears to be a sound strategy with no obvious downsides.

Given that the city is rapidly developing new amenities and attractions, celebration and revelation of new assets and dimensions to the city's identity remain very important. This is necessary to foster a greater appreciation of the scale of the city and its range of offer.

Oslo's key inherited asset in this arena is the link between its role as a leading City of Peace and the connection that Peace has with tolerance and diversity, global reach, relevance, reconciliation and fairness. Developing the City of Peace identity and narrative more directly will support Oslo's ambitions in relation to open-ness and welcome.

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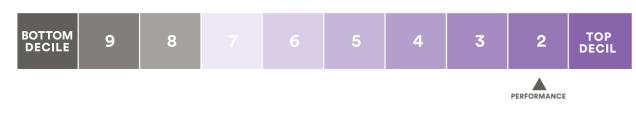


Governance

Oslo's effective, stable and transparent governance system receives limited coverage in global indexes, although where it does appear, the the city does rate among the top 15 global cities in most relevant rankings.

Oslo has among the most equal GINI coefficients among its peer group.



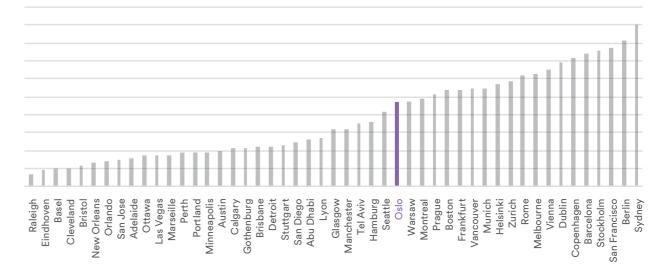


The 2015-16 review found that:

Since 2016:

Oslo is rated highly for civic capital and popular satisfaction with how the city is led and governed. Oslo remains a highly equal city by global standards, although social cohesion jor index.54 had declined in one major index, largely driven by the social impact of increasing property prices.

Measures of inequality continue to confirm Oslo's status as a highly equal global city – it was the 5th most equal among 47 peers in a new ma-



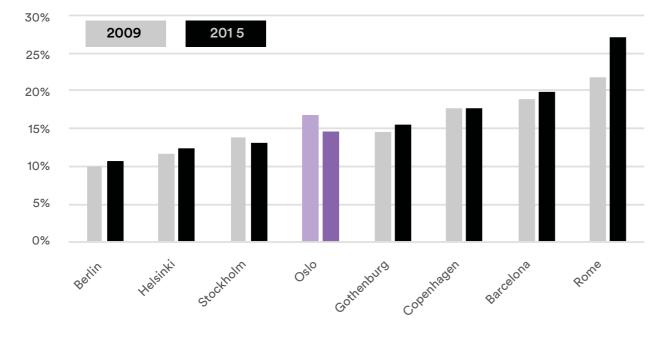
Source: IGARAPE

The major measure of social cohesion saw Oslo regain ground, climbing from 21st to 16th of 181 cities, behind Helsinki and Copenhagen, but ahead of Stockholm. Usually the most dynamic business centres tend to have lower social cohesion scores - therefore it is to Oslo's credit that its cycle of business growth and internationalisation has been matched by a rising score.55

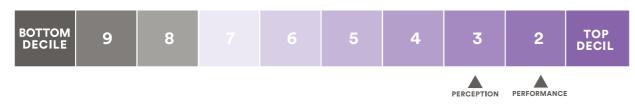
Oslo continues to be rated one of the most socially inclusive cities in Europe, with fewer people excluded than in nearly all Western European cities.56 The city is one of the few to have improved its record since the global financial crisis.



People at risk of poverty or social exclusion by NUTS 2 regions, as % of total population. Eurostat.



5.2 Quality and integrity



The 2015-16 review found that:

Oslo had become the leading the city in the world for urban planning, because of outstanding health outcomes, high bicycle use, and a critical mass of architects.

Satisfaction with transport, schooling and health all increased and placed Oslo in the top 20 of European cities for each, while Oslo residents are among the most pleased with

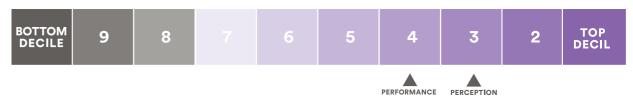
the investment in city's built form. The quality of its social infrastructure, namely health and housing, remain world-class.

Since 2016:

Oslo has slipped marginally to 5th globally for urban planning, but re mains at the top of its peer group.57

On a major study of the assets supporting Oslo's brand, the quality and reputation of the city's institutions and architecture are ranked 37th of 100 globally, a respectable 12th among 34 peer cities. However cities whose physical fabric is more well known tend to rank higher (e.g. Rome, Barcelona).58

5.3 Transparency and reliability



The 2015-16 review found that:

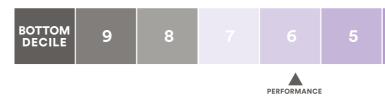
Since 2016:

Comparative measures of governance remain unreliable and sometimes penalise Oslo for high rates of tax or regulation. Meanwhile a major global reputation index found that Oslo slipped in global perceptions of city trust, reputation and esteem. Although Oslo was well respected, it was not as well known, especially outside Europe.

Oslo's governance rank has surprisingly fallen to 65th of 181 cities on one major study, below most of its peer cities. This is based partly on measures of e-government and the presence and functions of the municipal innovation department.59

As with other Nordic cities, Oslo's rank for public management has declined substantially to 24th of 32 peer cities due to a change in methodology which emphasises local tax rates.60

5.4 Influence and status



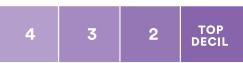
The 2015-16 review found that:

Oslo's reputation and presence on the world stage continued to not reflect its objectively strong assets. Relative to some of its peer cities, Oslo has been seen to lack globally renowned institutions, think tanks or companies. Despite its prominent role in international diplomacy, Oslo did not feature on measures of political influence.

performance in terms of hosting institutions and events. One index of mega-events (e.g. sporting, cultural or political) ranked Oslo in 68th place, although it favours larger cities with a greater number of events. Another ranking of the world's top 100 think tanks identifies two based in Oslo - a strong performance on

Since 2016:

Oslo still benefits from high national scores of institutional effectiveness - with Norway 5th globally due to low corruption and high business transparency and protection. Similarly, perceptions of corruption in Norway are the 6th lowest globally according to Transparency International.61



Oslo has begun to register better

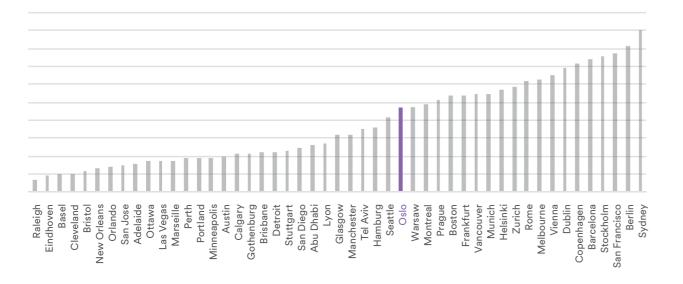
a par with Copenhagen, Stockholm and Vienna.62

Resonance's measure of a city's ability to "tell its story" through a variety of channels (e.g. business, social media, traditional media, diplomatic circuits) ranks Oslo 51st of 100 global cities, or 20th of 34 peers. Larger cities and major tourist destinations tend to do better on this measure.63



Oslo's visibility in international urban benchmarks

Overall Oslo has improved its visibility in city indexes since 2016. It is now the 44th most benchmarked city worldwide - an improvement of 8 places. This means it is also the 19th most ranked city among its 50 peers. It is striking that Oslo is more visible than other high-innovation cities such as Tel Aviv, Hamburg, Manchester and San Diego.



There are a number of high-profile global indexes where Oslo is still absent in 2017:

- AT Kearney's Global Cities Index
- Mori Memorial Foundation Global Power City Index
- PwC's Cities of Opportunity report
- Mastercard Global Destination Cities Index
- IBM's World's Most Competitive Cities
- EIU Safe Cities Index
- INSEAD: Global City Talent Competitiveness Index
- Arcadis Sustainable Cities Index
- CityReptrak Top Line Report

There are also more than 20 smaller studies that do not yet include Oslo, including many that are important to Oslo's status as a young, dynamic, innovative city. These include:

- CITIE
- Youth Cities Index
- The Good City Index
- National University of Singapore **Global Liveable Cities Index**
- Saffron World Cities Business **Brand Barometer**
- Citi Foundation Accelerating Pathways
- ULI Emerging Trends in Real Estate Europe
- KPMG Competitive Alternatives • Buck Consultants' European Tech Cities Index
- Startup Genome Best Start-up
- Ecosystems
- KPMG Competitive Alternatives

Reasons for Oslo's apparent lack of visibility across these different types of index remain similar to last year, and include:

(i) Slightly smaller population size, especially when benchmarks look at the 'city-only' (non-metropolitan) scale.

(ii) Surveys by companies that have a limited presence in Oslo (e.g. KPMG).

(iii) Perception of executive contacts in company network (e.g. PwC).

(iv) High reliance on English-speaking perspectives, and limited consultation with opinion in Asia where Oslo is more highly regarded.

(v) Exclusion from 'EU' or 'Western Europe' definitions by some global studies.

The good news for Oslo is that these factors are gradually becoming less important as indexes expand to cover more cities, and as new data methods (real-time tracking, online data mining) allow smaller cities to participate and become visible when they excel. Oslo has undoubtedly made progress since the 2016 edition, and has the potential to become even more visible as a young, pioneering, compact and forward-thinking city in the world of cities over the next 2-3 years.

- Grosvenor Resilient Cities • Ernst & Young European Attrac-
- tiveness Survey KPMG/Paris Investment Agency
- **Global Investment Monitor**
- Arthur D Little Urban Mobility 2.0
- INRIX Congestion Index
- Martin Prosperity Institute Rise of the Global Start Up City
- Dell Future Ready Economies (Global)
- Dell Women Entrepreneur Cities Index
- European Digital City Index
- Soot Free Cities (Europe)
- JLL City Momentum Index Europe



Appendix 1: Method note

i. For each of the 16 indicators, Oslo has been evaluated in multiple comparative rankings, indexes or benchmarks.

In each category, Oslo's performance has been graded on a 10-point scale, based on its performance against up all comparator cities.

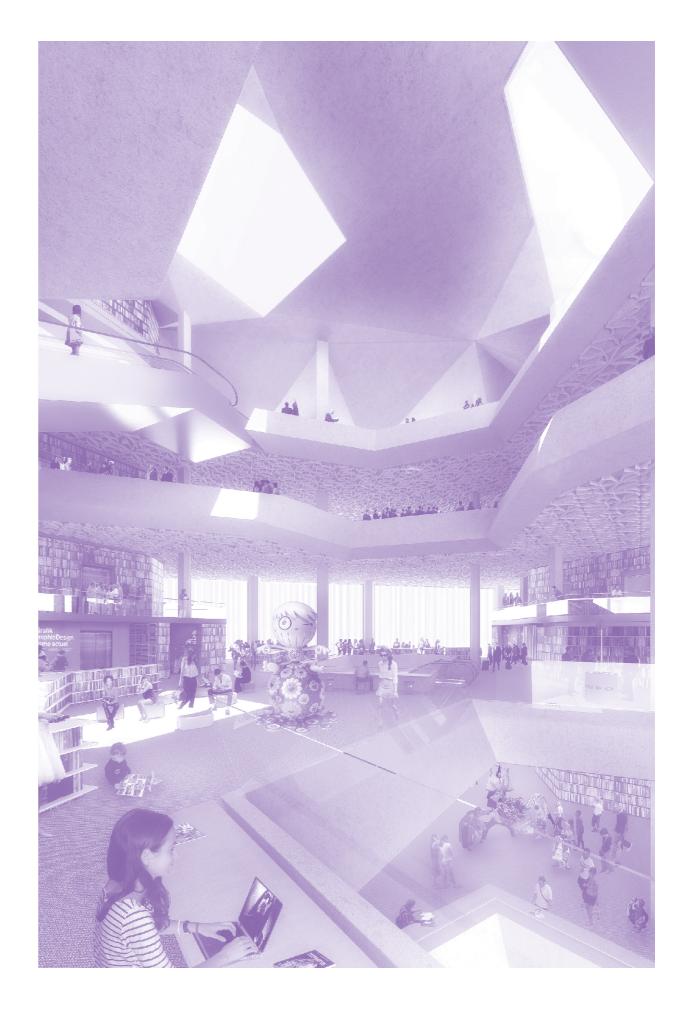
ii. For each ranking in each category, each peer city was assigned a score based on it performance compared to all other peer cities meeting the above criteria. This approach allows indexes that rank a very varied number of cities (some rank just 10, others rank up to 500) to be compared fairly to each other.

– e.g. 32 peer cities are ranked in the Innovation Cities Index. A city ranked 1^{st} receives a score of 1/50 = 0.02. A city ranked 50^{th} receives a score of 50/50 = the maximum score of 1.

– e.g. 14 peer cities are ranked in the Glassdoor Cost of Living measure. A city ranked 1^{st} receives a score of 1/14 = 0.071. A city ranked last scores the maximum score of 1.

- iii. An average score is then taken of all cities that are ranked in the same category of index (e.g. 'sustainability and resilience).
 - Cities are placed in order of their average score.

- Oslo's position in this list determines its grading in each category. If it is in the top 10% of measured cities, it is in the top decile and receives a maximum score for the spidergram. If it is between 10%-20% of measured cities, it is in the 2^{nd} decile, and so on



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