WCCD CITY DATA FOR THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Kópavogur 2019

WCCD | WORLD COUNCIL ON CITY DATA

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ISO 37120 PLATINUM CERTIFIED 2018 WCCD WORLD COUNCIL ON CITY DATA

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WCCD

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This report would not have been possible without the ongoing support of the WCCD global network of cities, of which every member is committed to leveraging high-calibre data to build the sustainable, smart, inclusive, resilient and prosperous cities of the future.

Introduction to the World Council on City Data

The World Council on City Data (WCCD) is the global leader on standardised city metrics and is implementing ISO 37120 with cities worldwide. ISO 37120: Sustainable Development of Communities – Indicators for City Services and Qualities of Life, is the first global standard on city indicators to be published by the International Organization for Standardization (ISO). The standard is a set of 100 globally comparative indicators designed to aid city officials and city managers in tracking annual performance and benchmarking data across 17 different themes. Most importantly, ISO 37120 is a demand-led standard, driven and created by cities, for cities.

In 2014, the WCCD created the first international certification system and Global Cities Registry™ for ISO 37120 and now coordinates all efforts on city data to ensure a consistent and comprehensive platform for standardised urban metrics through ISO 37120 and other standards under development. The WCCD hosts independently verified ISO 37120 data on its Open City Data Portal, which leverages cutting-edge visualisations and customised trend analyses and allows for city-to-city comparisons.

Cities report all ISO 37120 data on an annual basis and it is independently verified by a third-party. This high-calibre data demonstrates an incredible commitment from cities around the world to creating the sustainable, smart, inclusive, resilient and prosperous cities of the future. ISO 37120, together with the World Council on City Data, emerges at a critical time for cities and can offer accurate independently certified data to support measurement of progress by cities in reaching the Sustainable Development Goals by 2030.

WCCD's Newest ISO Standards

Following the publication of ISO 37120 in 2014, there was an immediate, city-led demand for additional indicators for cities to measure elements of resilience, alongside indicators which could measure a "smart" city. Responding to this mandate, two new standards were developed: ISO 37122 (Indicators for Smart Cities) was published in May 2019 and ISO 37123 (Indicators for Resilient Cities) is under development with publication by ISO in Autumn 2019.

These two new standards are intended to build upon the 100 indicators within ISO 37120, and all three will function together as a "family of standards." Individually, each standard will offer unique insights to cities adopting them - however, when used together, the three ISO standards will encourage greater, city-wide insights. Both new standards are mapped according to the same 17 themes of ISO 37120. Like ISO 37120, they are the result of a truly global effort, which will allow for global comparability and local applicability.

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WCCD ISO 37120 CERTIFIED CITIES

WCCD Cities

Aalter, Belgium
Population: 20,296
City land area: 81.92 km²
Climate Type: Temperate/mesothermal

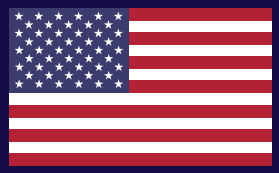
Ahmedabad, India
Population: 6,374,470
City land area: 466 km²
Climate Type: Tropical/megathermal

Amman, Jordan
Population: 4,007,526
City land area: 680 km²
Climate Type: Temperate/mesothermal

Amsterdam, Netherlands
Population: 834,713
City land area: 164.8 km²
Climate Type: Temperate/mesothermal

Barcelona, Spain
Population: 1,611,822
City land area: 102.16 km²
Climate Type: Temperate/mesothermal

Bogotá, Colombia
Population: 7,674,366
City land area: 1587 km²
Climate Type: Temperate/mesothermal



Boston, United States
Population: 672,840
City land area: 125 km²
Climate Type: Continental/microthermal

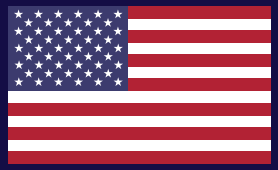
Brisbane, Australia
Population: 1,206,607
City land area: 1342.7 km²
Climate Type: Temperate/mesothermal

Buenos Aires, Argentina
Population: 3,059,122
City land area: 203 km²
Climate Type: Temperate/mesothermal

Cambridge, Canada
Population: 129,920
City land area: 113.01 km²
Climate Type: Continental/microthermal

Cape Town, South Africa
Population: 4,004,793
City land area: 2456 km²
Climate Type: Temperate/mesothermal

Ciudad Juárez, Mexico
Population: 1,391,180
City land area: 321.19 km²
Climate Type: Dry (arid and semiarid)



Doral, United States

Population: 61,130
City land area: 40.06 km²
Climate Type: Tropical/megathermal

Haiphong, Vietnam

Population: 1,981,983
City land area: 1527.4 km²
Climate Type: Tropical/megathermal

Dubai, United Arab Emirates

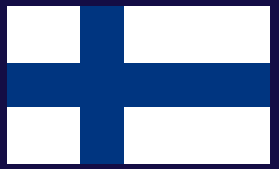
Population: 2,213,845
City land area: 4114 km²
Climate Type: Dry (arid and semiarid)

Heerlen, Netherlands

Population: 87,406
City land area: 45.53 km²
Climate Type: Temperate/mesothermal

Eindhoven, Netherlands

Population: 224,788
City land area: 88.84 km²
Climate Type: Temperate/mesothermal



Helsinki, Finland

Population: 635,181
City land area: 216.5 km²
Climate Type: Continental/microthermal

Gdynia, Poland

Population: 247,478
City land area: 135 km²
Climate Type: Temperate/mesothermal

Jamshedpur, India

Population: 691,108
City land area: 63.63 km²
Climate Type: Tropical/megathermal

Greater Melbourne, Australia

Population: 4,725,316
City land area: 9990.5 km²
Climate Type: Temperate/mesothermal

Johannesburg, South Africa

Population: 4,622,045
City land area: 1645 km²
Climate Type: Tropical/megathermal

Guadalajara, Mexico

Population: 4,980,755
City land area: 3263 km²
Climate Type: Temperate/mesothermal

Kielce, Poland

Population: 197,704
City land area: 110 km²
Climate Type: Temperate/mesothermal

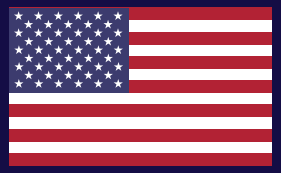
WCCD Cities

Kópavogur, Iceland
Population: 36,910
City land area: 110.14 km²
Climate Type: Polar and alpine

Koprivnica, Croatia
Population: 30,872
City land area: 90.94 km²
Climate Type: Continental/microthermal

León, Mexico
Population: 1,514,077
City land area: 1200 km²
Climate Type: Temperate/mesothermal

London, United Kingdom
Population: 8,787,892
City land area: 1572 km²
Climate Type: Temperate/mesothermal



Los Angeles, United States
Population: 4,041,707
City land area: 1204.34 km²
Climate Type: Temperate/mesothermal

Makati, Philippines
Population: 582,602
City land area: 27.36 km²
Climate Type: Tropical/megathermal

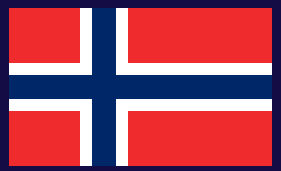
Makkah, Saudi Arabia
Population: 1,919,909
City land area: 483.25 km²
Climate Type: Dry (arid and semiarid)

Melbourne LGA, Australia
Population: 148,039
City land area: 37.7 km²
Climate Type: Temperate/mesothermal

Minna, Nigeria
Population: 255,631
City land area: 72 km²
Climate Type: Tropical/megathermal

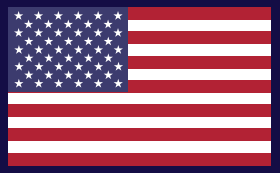
Mississauga, Canada
Population: 721,599
City land area: 292.43 km²
Climate Type: Continental/microthermal

Oakville, Canada
Population: 194,000
City land area: 138.89 km²
Climate Type: Continental/microthermal



Oslo, Norway
Population: 658,390
City land area: 426.38 km²
Climate Type: Continental/microthermal

Piedras Negras, Mexico
Population: 163,595
City land area: 70.87 km²
Climate Type: Dry (arid and semiarid)



Portland, United States
Population: 639,863
City land area: 345.76 km²
Climate Type: Temperate/mesothermal

Porto, Portugal
Population: 214,329
City land area: 41.42 km²
Climate Type: Continental/microthermal

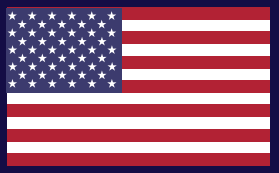
Pune, India
Population: 3,124,458
City land area: 243.84 km²
Climate Type: Tropical/megathermal

Québec, Canada
Population: 531,902
City land area: 453.38 km²
Climate Type: Continental/microthermal

Riyadh, Saudi Arabia
Population: 6,506,700
City land area: 3115 km²
Climate Type: Dry (arid and semiarid)

Rotterdam, Netherlands
Population: 629,606
City land area: 216 km²
Climate Type: Temperate/mesothermal

Saint-Augustin-de-Desmaures, Canada
Population: 19,369
City land area: 85.84 km²
Climate Type: Continental/microthermal



San Diego, United States
Population: 1,374,812
City land area: 842.23 km²
Climate Type: Temperate/mesothermal

Shanghai, China
Population: 24,151,500
City land area: 6340.5 km²
Climate Type: Temperate/mesothermal

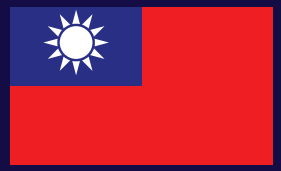
Shawinigan, Canada
Population: 48,967
City land area: 737 km²
Climate Type: Continental/microthermal

Sintra, Portugal
Population: 382,521
City land area: 319.23 km²
Climate Type: Temperate/mesothermal

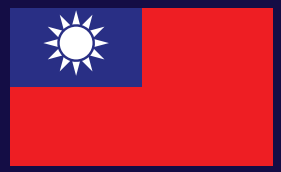
WCCD Cities

Surat, India
Population: 5,326,690
City land area: 326.52 km²
Climate Type: Tropical/megathermal

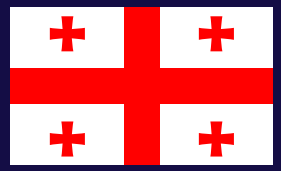
Surrey, Canada
Population: 534,690
City land area: 316.41 km²
Climate Type: Temperate/mesothermal



Tainan City, Taiwan
Population: 1,886,522
City land area: 2191.65 km²
Climate Type: Temperate/mesothermal



Taipei, Taiwan
Population: 2,683,257
City land area: 271.80 km²
Climate Type: Temperate/mesothermal



Tbilisi, Georgia
Population: 1,113,000
City land area: 502 km²
Climate Type: Temperate/mesothermal

The Hague, Netherlands
Population: 519,988
City land area: 98.13 km²
Climate Type: Temperate/mesothermal

Toronto, Canada
Population: 2,876,095
City land area: 634 km²
Climate Type: Continental/microthermal

Torreón, Mexico
Population: 679,288
City land area: 305.23 km²
Climate Type: Dry (arid and semiarid)

Tshwane, South Africa
Population: 3,275,152
City land area: 6345 km²
Climate Type: Dry (arid and semiarid)

Valencia, Spain
Population: 787,266
City land area: 137.48 km²
Climate Type: Temperate/mesothermal

Vaughan, Canada
Population: 306,233
City land area: 273.56 km²
Climate Type: Continental/microthermal

Vijayawada, India
Population: 1,181,243
City land area: 61.88 km²
Climate Type: Tropical/megathermal

Welland, Canada

Population: 52,293
City land area: 81.04 km^2
Climate Type: Continental/microthermal

Whitby, Canada

Population: 136,235
City land area: 146.66 km^2
Climate Type: Continental/microthermal

Zagreb, Croatia

Population: 790,017
City land area: 641.32 km^2
Climate Type: Continental/microthermal

Zwolle, Netherlands

Population: 124,896
City land area: 119.3 km^2
Climate Type: Temperate/mesothermal

Introduction

WCCD CITY DATA FOR THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS 2018

A key reason for the World Council on City Data to prepare this Report – WCCD City Data for the United Nations Sustainable Development Goals Kópavogur 2019 – is to highlight the fact that high calibre city level data is already building in breadth and depth to support the SDGs, and that this data is essential to the success of the SDGs, since city leaders stand at the pivotal points for global change in building a more sustainable planet. Cities represent more than 80 percent of global GDP. This WCCD results-driven tracking empowers cities to direct and leverage investment, a core success factor in operationalizing each and every target across all of the SDGs. It is cities and globally standardized city level data that present an unparalleled opportunity for successful implementation of the SDGs by 2030.

The cities whose data is featured in this report are cities that have dedicated their staff and leadership to building a culture of data that is driving progress towards a sustainable planet by 2030.

MOVING FROM THE MDGs (2000-2015) TO THE SDGs (2015-2030): THE ESSENTIAL ROLE OF CITIES AND CITY LEVEL DATA

The Millennium Development Goals (MDGs), which were established in the year 2000, included 8 goals that were clear and concise, with measurable, quantitative targets to the year 2015. The focus of the MDGs was improvement of the lives of the world's poorest people. Leaders of 189 countries signed this historic millennium declaration at the United Nations Millennium Summit in 2000.

Like any international agreement, there were both successes and shortcomings. The successes included widespread public awareness, dedication and mobilization across the globe to combat poverty and its attendant challenges of hunger, health, education and inequality. The shortcomings of the MDGs – two in particular of note here for this report - include a core weakness of accurate, standardized measurement and time sensitive data to support monitoring on progress towards the 2015 targets. Moreover, the MDGs were silent on the role of cities in mobilizing support and action to realize the success of the eight goals, despite the fact that within the MDG time period (in 2007), the world was to pass the historic global population threshold, wherein half of the world's population was to become urban. This report, WCCD City Data for the United Nations Sustainable Development Goals 2018, with a dedicated dual focus on data and cities, aims to address, and fill, these two critical gaps in support of the successful achievement of the Sustainable Development Goals by 2030.

The Sustainable Development Goals (SDGs) were established in 2015 with a view to creating a more sustainable world by 2030. While agreeing that combatting poverty should continue beyond the 2015 target date and retirement of the MDGs, there was a growing consensus that the world also needed to move forward onto a more sustainable trajectory, in recognition of our changing climate and other serious environmental challenges. The Sustainable Development Goals (SDGs) were established for the post 2015 Development Agenda - 2015-2030, and include 17 goals that encompass worldwide environmental objectives alongside and very much connected to the poverty reduction goals of the MDGs.

The Sustainable Development Goals have been developed to bridge and carry forward the poverty agenda established by the MDGs pre-2015 and build the sustainable development agenda post-2015. This new era reflects a commitment to overcome the two challenges arising with respect to the MDGs, namely, to recognize the critical role of cities in building a more sustainable planet, and, to confront the need for standardized data and methods of monitoring local progress towards each of the 17 Sustainable Development Goals, both deemed essential to drive successful achievement of the SDGs by 2030.

LOCALIZING THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

A global transformation has occurred that positions cities at the core of the post-2015 development agenda. Urbanization is one of the most significant trends of the past and present century, providing the foundation and momentum for global change. The shift towards an increasingly urbanized world constitutes a transformative force which can be harnessed for a more sustainable trajectory, with cities taking the lead to address many of the global challenges of the 21st century, including poverty, inequality, migration, unemployment, environmental degradation, and climate change. City leaders have become a positive and potent force for addressing sustainable economic growth, development and prosperity, and for driving innovation, consumption and investment in both developed and developing countries.

Economic growth and development have usually been closely associated with the performance of nations. In recent decades, cities have emerged on the global stage as economic powerhouses, engaging in world markets to create more jobs, to attract global talent and investment, and to spur long-term, sustainable economic growth. Cities provide the economic basis for national and international growth and innovation. They are the most common sites for business investment, provide the institutional and economic basis for higher academic and vocational education, and are prominent sites for research and development (R&D). Cities are now responsible for more than 80 percent of global GDP. The prosperity of nations and regions is, more than ever, dependent upon the economic performance of cities.

While cities were not represented specifically in the MDGs, one of the 17 Goals for the new 2030 Agenda is dedicated to addressing cities – Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. The representation of cities as a specific goal and focus in the post-2015 Development Agenda is recognition of the pivotal role of cities as a transformative influence in building sustainability.

The multi-faceted roles of city leaders and local administrations in achievement of the post-2015 Agenda go well beyond Goal 11 and can be effectively considered across all of the 17 SDGs. City mayors, city managers, city planners and designers, city engineers and citizens in their daily work and routines are all directly or indirectly related to each of the 17 SDGs. City leaders are driving policy change for more sustainable futures and are recognizing their crucial role in global SDG achievement.

Considerations on each of the 17 SDGs from a local perspective is essential, since achieving the UN SDGs will be a battle largely waged in cities, where in most countries, a large and growing percentage of the population resides. What follows is a highlight on the critical importance of localizing each of the 17 Sustainable Development Goals, since the powers and responsibilities held by local governments are pivotal to operationalizing each Goal.

Localizing Goal 1 – No Poverty

‘End poverty in all its forms everywhere’

Local government leaders and their professional staff are responsible for urban basic services, including water, sanitation, education and transport which are central to alleviating poverty in cities. City leaders are also instrumental in developing local economic development strategies that help to build jobs, secure incomes, and support youth entering the work force. Cities are responsible for infrastructure development such as wastewater and drainage, core to building resilient communities and ensuring safety for citizens, especially the poorest and vulnerable. Progress on Goal 1 is highly dependent on local action with local government leadership positioned on the front line to end poverty by 2030.

Localizing Goal 2 – Zero Hunger

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

Local governments must ensure that their urban residents are able to access food at reasonable prices and it is local officials that can help to direct child nutrition programs in schools and overall nutrition education through local health clinics and service agencies. City planners and economic development officials in local governments are charged with the efficient location and operation of food terminals, efficient and on-time transport access into and out of the terminals, as well as the management of safe storage of food, in order to ensure food security for city populations. City planners and public works officials in city governments are also the drivers of policy on urban agriculture, and related services such as water, wastewater treatment and sanitation systems. Local level action to end hunger by 2030 is a major component for effective on the ground progress towards Goal 2.

Localizing Goal 3 – Good Health and Well-Being

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

Local governments are responsible for city wide infrastructure, green space, public recreation facilities, slum improvement, affordable housing and ensuring access by the poor to basic services, all of which are key components of good health and well-being of urban residents. City planners and transport planners are responsible for ensuring its citizens have safe and reliable roads and transit that reduce road and traffic accidents, one of the targets of Goal 3. It is also local governments that plan and design for alternative energy and transport services that can help to reduce air pollution, and by planning walkable cities and safe bike paths, they are also positioned to help foster healthy lifestyles, a core target of Goal 3. Increasingly local governments are also taking leadership on health issues such as substance abuse, epidemics and HIV/AIDs, providing education, outreach, emergency response, and information services across their cities.

Localizing Goal 4 – Quality Education

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

Local governments play a central role in ensuring education is accessible to all. This is particularly true for primary education which falls directly under most local government administrations in many countries. Local governments are closest to the communities that require support in ensuring access to schools, particularly through outreach to vulnerable and marginalized individuals. Local governments are key leaders in ensuring the safety of girls and their equal access to schools in their districts in order to ensure equality in education. It is also at the local level where planning, designing, building and upgrading of schools and education facilities will address the target of ensuring these buildings are child, disability and gender sensitive.

Localizing Goal 5 – Gender Equality

‘Achieve gender equity and empower all women and girls’

There is a need to localize Goal 5 and recognize that it is local governments and local community leaders in cities that are critically positioned to take action on reaching this goal by 2030. While national legal and legislative action is required, local governments have an important role in implementing, policing and enforcing these laws and addressing violence against women, discriminatory practices, providing counselling to women who have suffered abuse, and ensuring the safety of girls through safe streets programs, safe public spaces, and fair access to city services, ownership of land and shelter. The target in Goal 5 to ensure women’s full participation and equal opportunities for leadership in public life is also an important priority for local government where women elected to public office are empowered and often use local government as a stepping stone to then seek higher level office in provincial/state or national government.

Localizing Goal 6 – Clean Water and Sanitation

‘Ensure availability and sustainable management of water and sanitation for all’

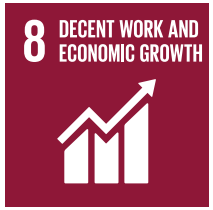
With many countries experiencing upwards of 80 percent of their population living in cities, the need to localize SDG 6 is essential to guide action on the ground. In many poorer cities a large portion of residents are often not served with clean water, solid waste collection and sanitation services. It is local governments, the level of government closest to the people, that are responsible for the provision of water and sanitation services. Public works officials in city governments are also responsible for reducing pollution in water, managing wastewater treatment, eliminating dumping and improving water use efficiency, all targets of Goal 6. Local leadership across and between cities and transboundary cooperation is also a rising policy agenda driving integrated water management across regions, a key target in Goal 6. Hence progress towards 2030 need be closely monitored and implemented at the local level.

Localizing Goal 7 – Affordable and Clean Energy

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

Local governments have control over land and buildings through planning and zoning codes that impact directly on investment in energy efficient buildings and compact design. Local governments also have the power and responsibility to inject sustainability criteria into their city procurement policies. In addition, local governments own and operate or simply regulate many public buildings in their jurisdictions, including: hospitals; schools; recreations facilities such as arenas, gymnasiums and sports facilities; government offices (city halls); and universities. These powers can be used to impact energy consumption, ensure adoption of renewable energy use in these buildings, and drive the formulation of energy efficiency guidelines across the city for buildings, street lighting, and all related city services. Cities also regulate automobile and transport services which can positively impact energy efficiency, ensure cleaner fossil fuel technologies adoption and lower carbon emissions. Local governments are therefore pivotal in ‘moving the needle’ on clean energy in cities globally.

Localizing Goal 8 – Decent Work and Economic Growth



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

Local governments are uniquely positioned to promote economic growth and encourage employment as part of their local economic development planning. Both large and small businesses are able to flourish in cities, while local authorities can leverage land-use planning and fiscal and economic development strategies to attract new business and capitalise on skilled labour that is abundantly present in urban areas. Local governments are able to promote diversification and innovation through development-oriented policies that can drive entrepreneurship, creativity and business development. Locally supported job training programs – characterised by gender inclusivity – promote female entrepreneurship. Local grants and traineeship programs, including language training for new immigrants to cities, are directed by city governments and positively impact upon youth unemployment and build opportunities for higher levels of employment in marginalized communities, while enfranchising persons with disabilities. Local governments possess the judicial tools and oversight to eradicate forced labour (especially in the case of children) while protecting labour rights and promoting safe and secure working environments through their building codes and planning laws. Local governments also actively promote tourism, and encourage the subsequent economic growth and resulting jobs that come with it.

Localizing Goal 9 – Industry, Innovation and Infrastructure

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

Local governments are enviably nimble in their ability to harness the skills and knowledge sets from their local academic institutions, as well as capture cutting-edge technology, in order to drive sustainable development that promotes local industrial growth. Local governments are also essential in the development, management and maintenance of information and communications technology (ICT) for residents and businesses in their cities. Local administrations also have the ability to encourage innovation and development of more sustainable, smart and green infrastructure that will serve the local area and surrounding territories. Local governments are able to attract large scale enterprise, create and engage in public-private partnerships (PPPs), while creating and supporting entrepreneurship programs that will encourage small business growth and development. Urban centres – as national innovation hubs – often have access to the critical technologies which will assist with industrial diversification, coupled with the ability to create conducive policy environments and incentives to bring this diversification into reality. ICT gaps can be addressed at a local level, and existing local institutions (such as libraries or community gathering centres) can be leveraged for both training purposes and as hubs to incubate innovation while providing the ICT tools required to encourage entrepreneurship.

Localizing Goal 10 – Reduced Inequalities

‘Reduce inequality within and among countries’

As front-line service providers to citizens of a myriad of cultural backgrounds, local governments are well equipped to foster and ensure political inclusion in their cities. Through the championing of local causes, traditionally underrepresented groups are able to participate in public consultation processes, which develops voice, empowers and builds inclusive communities, and creates an enhanced capacity in all citizens to engage at a political level. In many countries, local government bodies are much more gender representative and culturally inclusive than upper levels of government, which is essential in ensuring that traditionally underrepresented groups have increased access to basic city services. Local governments – through training and the promotion of entrepreneurship – are able to lift the most vulnerable citizens out of poverty, and in doing so are able to empower and promote social, economic and political inclusion. Local level legislation can be passed (and locally enforced) to drive the elimination of discriminatory practices.

Localizing Goal 11 – Sustainable Cities and Communities

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

Goal 11 is already highly localized, being the stand alone goal of the SDGs devoted to cities. The target to, by 2030 ‘ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums’ is a direct responsibility of local governments. Planners, urban policy experts, and infrastructure officials work together in cities to implement this target on a daily basis. Access to affordable shelter is a challenge of all cities, regardless of income and cities are on the frontline to regulate land and housing and construction markets. Slums and homelessness pose two of the key challenges for city leaders throughout the world that are encompassed in Goal 11. Indeed, all of the targets in Goal 11 – from public transport, reduction of emissions, green space, public space, participatory planning, urban sprawl, solid waste management and recycling, resilience to risk and disasters, and urban rural cooperation – are core responsibilities of local governments. It is local governments that are driving a more dedicated inter-governmental arrangement for investment funding and legislative reform needed to support Goal 11 and all of the other SDG targets.

Localizing Goal 12 – Responsible Consumption and Production

‘Ensure sustainable consumption and production patterns’

Local governments play a central role in reducing transport and carbon emissions and in fostering the sustainable consumption and production of energy and water. The powers and responsibilities of city administrations over land use management, procurement, infrastructure development and maintenance, urban planning and zoning law, education and training programs, places cities in an important position to lead on sustainable consumption and production. With global food waste typically occurring in regions with a higher concentration of inhabitants, it is in cities where the reduction of food loss will begin to make a national impact. Cities are also on the frontline in terms of waste reduction, waste collection and waste disposal, including not only solid waste but more high-risk waste arising from the use of toxic chemicals. It is cities therefore that can help to mitigate the improper disposal of chemical waste and waste by-products in general. It is also at the local level, where the concept of sustainable consumption and production can be best introduced into the local education system, from primary through secondary education which can then inform similar priorities of course work in post- secondary education, which will, in turn, drive innovation around sustainable development in urban regions.

Localizing Goal 13 – Climate Action

‘Take urgent action to combat climate change and its impacts’

Cities are at the centre of the need for climate action. It is estimated that cities are responsible for around 70 percent of global energy consumption and energy-related greenhouse gas emissions. The concentration of people, resources and infrastructure in cities is making societies more vulnerable to the adverse impacts of climate change, such as sea-level rise and storm events. Cities are likely to bear a major share of the burden of the costs and risks associated with climate change adaptation, as well as the responsibility of establishing more resilient infrastructure. However, cities also represent a key opportunity for driving progress toward low-carbon development and societal resilience, further enabled by the leadership being taken by mayors globally on the climate agenda. Cities can pursue a wide range of strategies to address climate resilience and low carbon development, including integrated measures across areas including planning, transportation, energy, and buildings.

Localizing Goal 14 – Life Below Water

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

With many cities throughout the world located adjacent to either large fresh-water bodies, or ocean-adjacent, these large population centres are increasingly responsible for significant amounts of marine pollution globally. Conservative estimates place the amount of pollution in the oceans generated by land-based activities at 80 percent. These impacts are not only from coastal cities but also include inland settlements in river basins that drain into the marine environment. Nutrient pollution, industrial accidents and marine debris significantly damage marine ecosystems. Enhanced cooperation at all levels of government – but arguably starting with cities driving an inter-governmental partnership – is essential to minimise the impact of ocean acidification. Cities and upper levels of governments must work together to regulate harvesting and overfishing while creating marine protection zones and coastal conservation regions. Scientific knowledge and research to mitigate the loss of marine biodiversity must be driven in partnership between corporations, local governments and the academic institutions that are often located in large, urban areas. Cities are responsible for land use planning and waterfront development that have direct impact on coastal protection and conservation. Since cities contribute major pollutant loads through domestic sewage, industrial effluents, and marine debris, city administrations’ responsibilities for urban sanitation and solid waste management, as well as recycling incentives, are essential to reducing coastal zone pollution.

Localizing Goal 15 – Life on Land

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

Cities play an important and direct role in meeting the target of ensuring the conservation, restoration and sustainable use of local ecosystems. As urban populations grow rapidly in many parts of the world, minimising encroachment on important natural systems through prevention of sprawl and building to appropriate urban densities is critical for managing city growth. This is to a large extent controlled by planning, and zoning regulations and land-use policy decisions of local governments. Effective and integrated regulation around the use of land in urban areas serves to halt and reverse land degradation. City leaders also have the authority to ensure that hazardous waste and materials are properly disposed of. Sustainable management of inland waterways, as well as the vegetation that surrounds them, will not only improve water quality but will also prevent land erosion and the loss of biodiversity in cities. The regulatory powers of local governments position city leaders to protect, conserve and promote sustainable land use in cities and their hinterlands.

Localizing Goal 16 – 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’

Local governments, being the level of government closest to the people, means that local leaders are best positioned to build more inclusive societies. Cities engage in a wide range of public consultations, planners conduct public hearings and many cities engage in participatory decision-making, including participatory budgeting. Cities are often the most diverse population centres in a country. They include a mix of cultures – each with unique backgrounds and identities – and are therefore positioned at the forefront of helping to create a more peaceful, inclusive and harmonious society. Local governments are at the vanguard in the fight to end discrimination against women and children and it is the local police forces that are ‘on the street’ to best address violence perpetrated against their most vulnerable citizens. Local governments are increasingly adopting open data models that allow for increased accountability and inclusion of citizens in service delivery and municipal finance, building more open and transparent government decision making and inclusive models of governance.

Localizing Goal 17 – Partnership for the Goals

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

Global partnerships and cooperation are essential to achieving the 2030 Agenda for Sustainable Development and city to city partnerships are vital to this global effort. Inclusive partnerships built upon principles and values, a shared vision, and shared goals place people at the centre and it is at the local level where these partnerships are forming. As this report demonstrates, globally standardized and third party verified city data, ensures that cities can form learning partnerships and global exchange in order to cooperate in achieving the 2030 Agenda. Cities need to be strong and accountable partners for driving implementation and investment in support of the SDGs. To play this role more effectively, many cities have opportunities to enhance their financial management through increasing revenues, improving tax collection and reducing debt levels. By improving their fiscal position, cities are better able to invest in infrastructure and essential services that are critical for achieving the SDGs locally and leveraging further investment from higher levels of government, international financial institutions, the private sector and other sources. This builds a virtuous cycle of an expanded revenue base enabling additional productive investment in infrastructure and services. Globally standardized city level data connects cities in a strategic global partnership to better monitor progress, exchange knowledge on how to best reach the targets, and accelerate the achievement of the Sustainable Development Goals.

WCCD AND ISO 37120 - CITY DATA FOR MONITORING LOCAL PROGRESS ON THE SUSTAINABLE DEVELOPMENT GOALS TO 2030

The World Council on City Data, in preparing this Report – WCCD City Data for the United Nations Sustainable Development Goals Kópavogur 2019 – has mapped all of the indicators in ISO 37120 from the WCCD database, to each of the 17 Goals and each of the targets. All 17 goals and many of the targets attached to each Goal can be supported by the WCCD indicators.

By mapping the Sustainable Development Goals to ISO 37120, the core work contained in this Report, the WCCD has built a numeric reporting mechanism for cities to both actively embrace the SDGs at the local level and also monitor progress towards 2030.

The data in this Report– WCCD City Data for the United Nations Sustainable Development Goals Kópavogur 2019 – is based upon 100 key performance indicators (KPIs) that were developed and tested by cities across several countries worldwide from 2008 to 2012. This work was led by researchers and professionals, dedicated to cities and city level data, that were instrumental in building the Global Cities Institute at the University of Toronto and the World Council on City Data in Toronto, Canada. These indicators were built and prioritized by cities, with globally agreed to standardized definitions on what to be measured and standardized methodologies on how to measure. The result was a set of city indicators ranging across a set of themes, prioritized by cities, regarding performance measurement of city services and quality of life.

After 5 years of development and testing in cities across a regionally representative sample of over 80 countries, this set of indicators was then presented in 2012 to the International Organization for Standardization (ISO) in Geneva. An ISO standard was then drafted within ISO Technical Committee 268 and the draft standard was globally balloted across some 25 countries between 2012 and 2014. This work led to the first ISO standard ever published for cities – ISO 37120 – Indicators for Sustainable Cities and Communities. This first ISO Standard was published in 2014.

The data contained in this report is in accordance with ISO 37120, and is the most recent data reported by the cities within the WCCD global network. The cities whose data is showcased in this report are cities that have become members of the WCCD global network that is implementing ISO 37120 and these cities are now part of the WCCD Global Cities Registry™. This data is reported by cities to the WCCD on a regular, annual basis, and is independently verified by third party auditors. The data is globally standardized and comparable across cities. This emerging global network of cities now spans more than 30 countries.

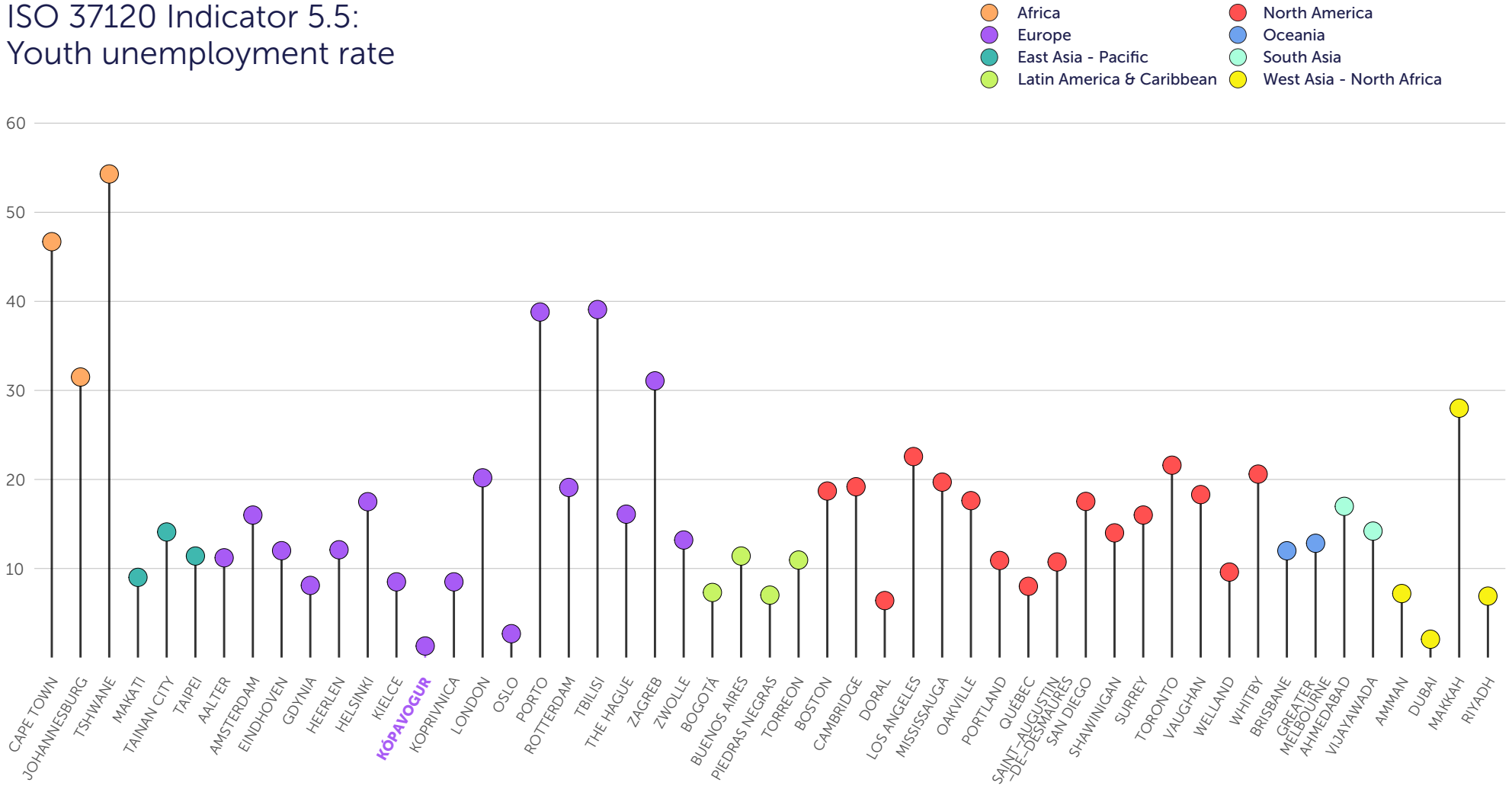

1
NO
POVERTY

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 1 – NO POVERTY

RIGHTS TO ECONOMIC RESOURCES

ISO 37120 Indicator 5.5:
Youth unemployment rate



WCCD | WORLD COUNCIL ON CITY DATA

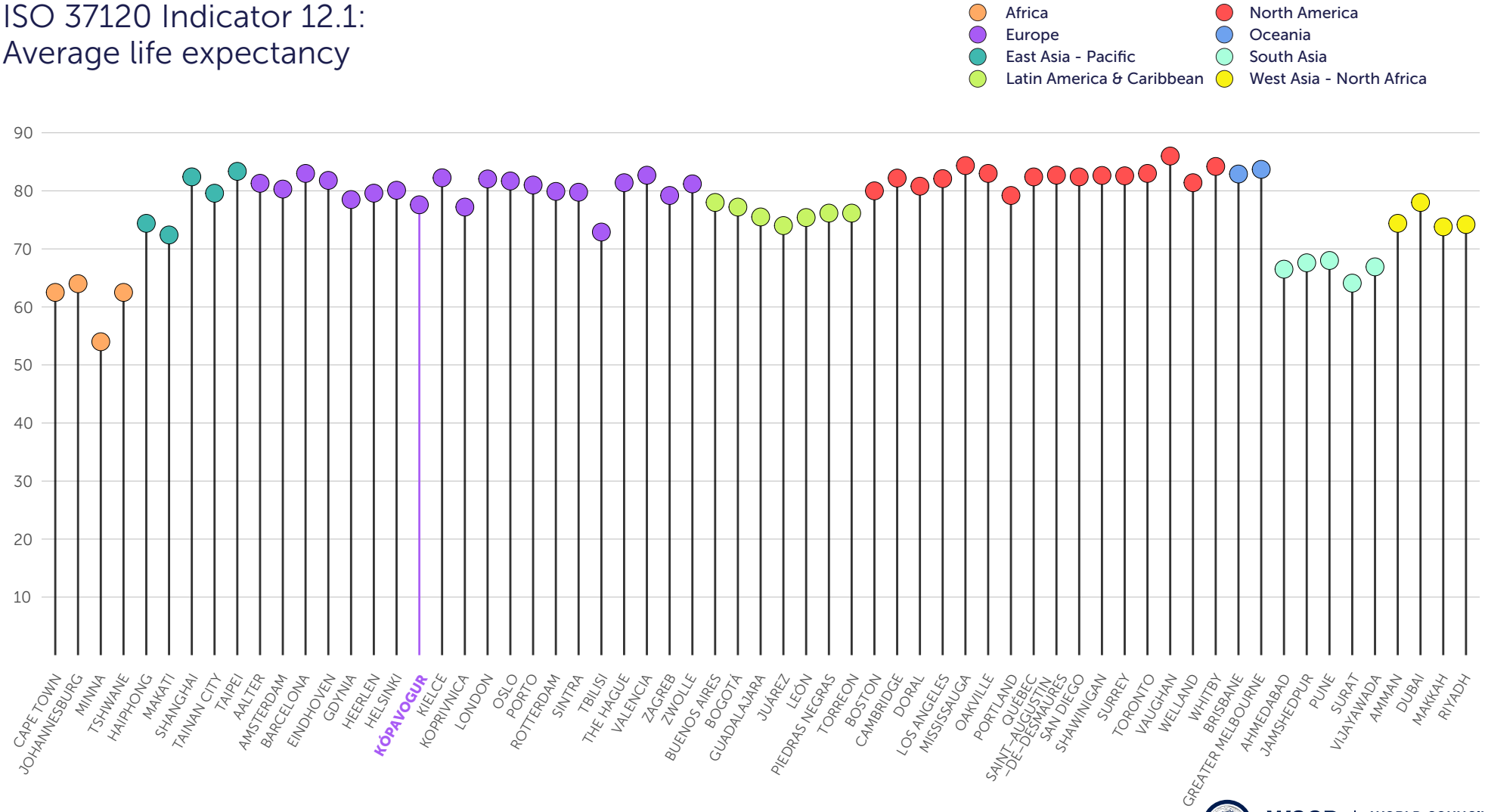

2
ZERO
HUNGER

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 2 – ZERO HUNGER

END MALNUTRITION AMONG CHILDREN UNDER 5, ADOLESCENT GIRLS AND MOTHERS

ISO 37120 Indicator 12.1:
Average life expectancy



WCCD | WORLD COUNCIL ON CITY DATA

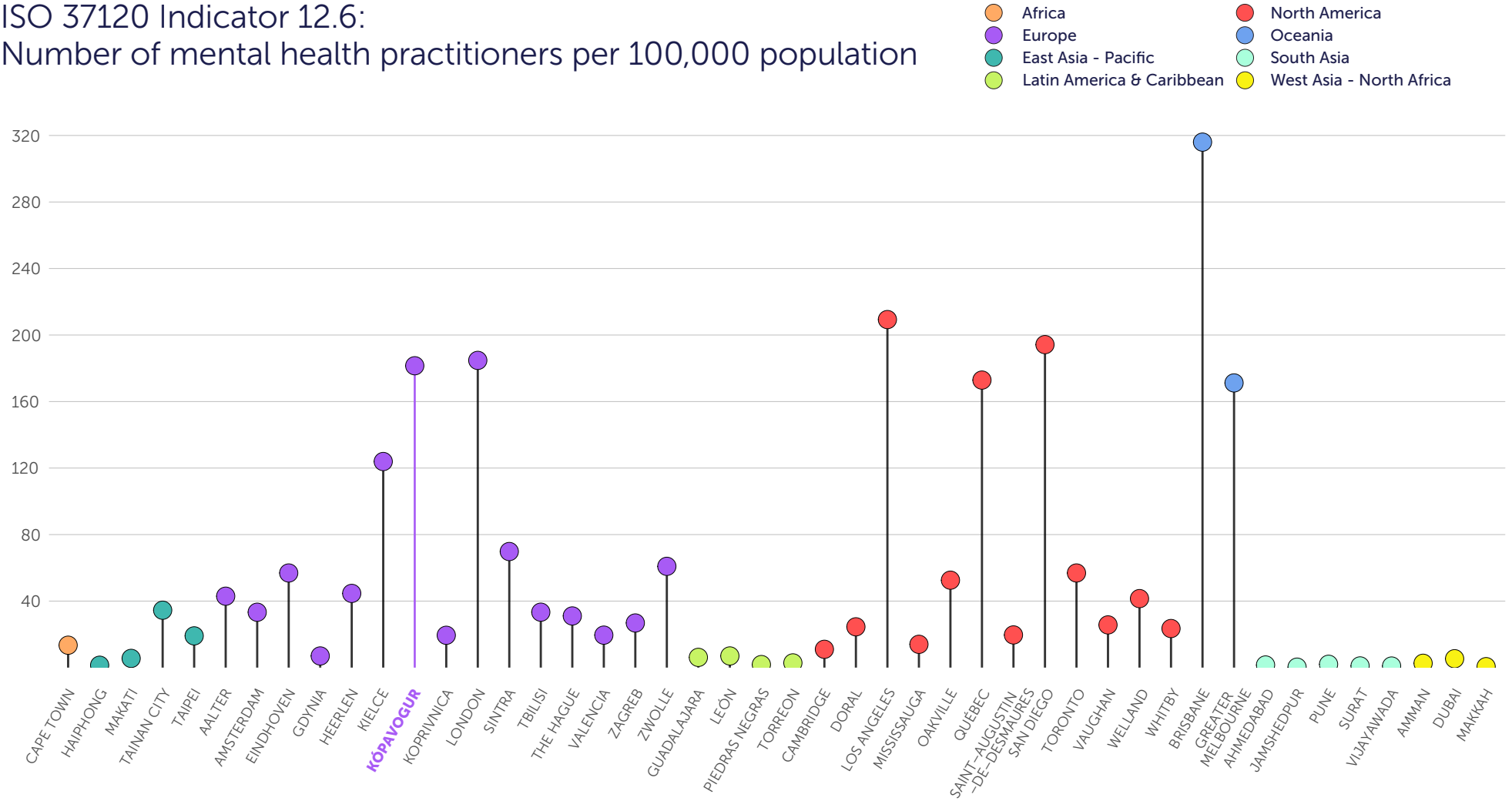

3
GOOD HEALTH
AND WELL-BEING

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 3 – GOOD HEALTH AND WELL-BEING

REDUCE PREMATURE MORTALITY AND PROMOTE MENTAL HEALTH AND WELL-BEING

ISO 37120 Indicator 12.6:
Number of mental health practitioners per 100,000 population



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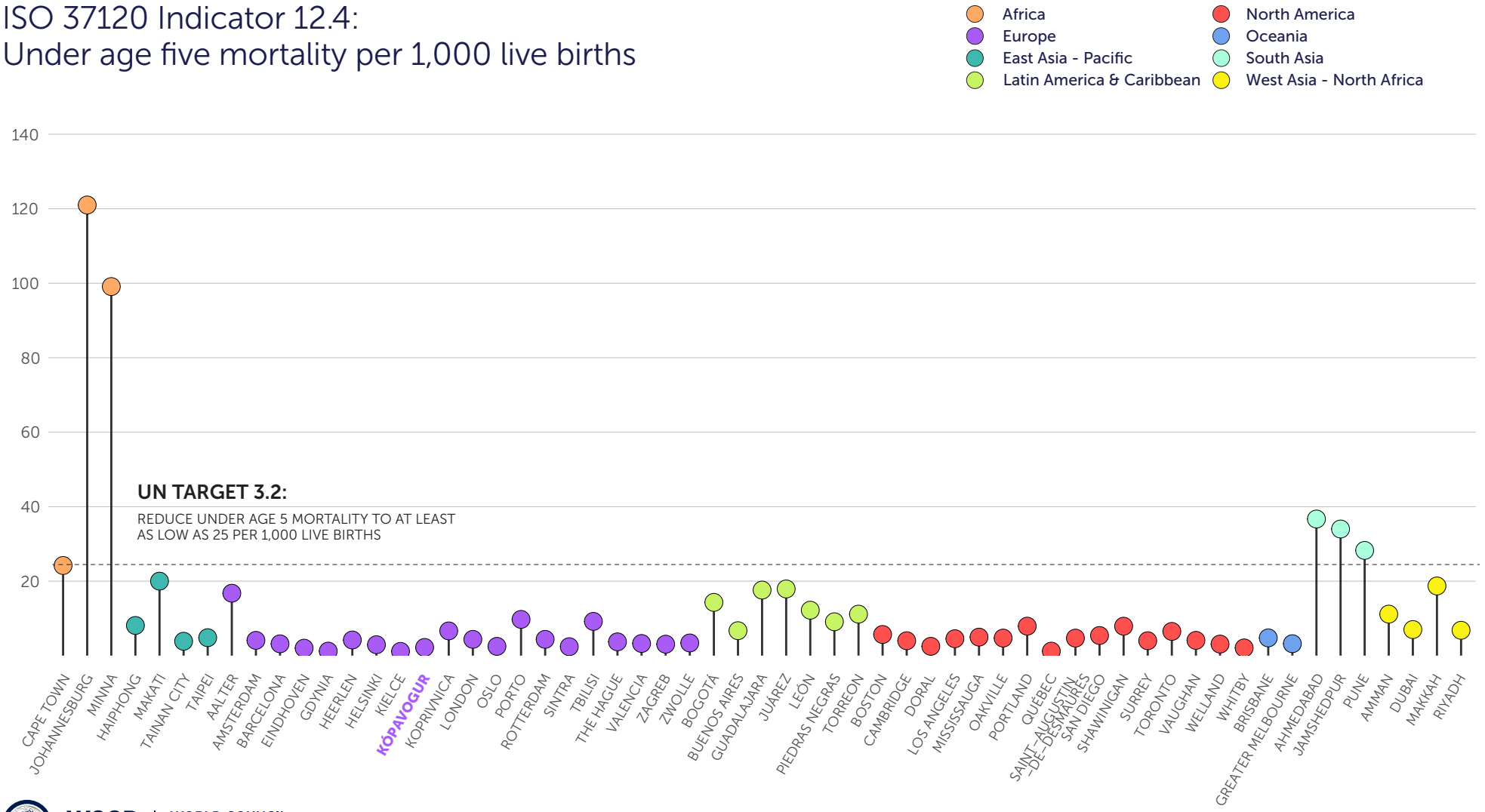
WCCD CITY DATA SUPPORTING SDG 3 – GOOD HEALTH AND WELL-BEING

WCCD SUPPORTS THE SDGS

END PREVENTABLE DEATHS OF NEWBORNS AND CHILDREN

ISO 37120 Indicator 12.4:
Under age five mortality per 1,000 live births



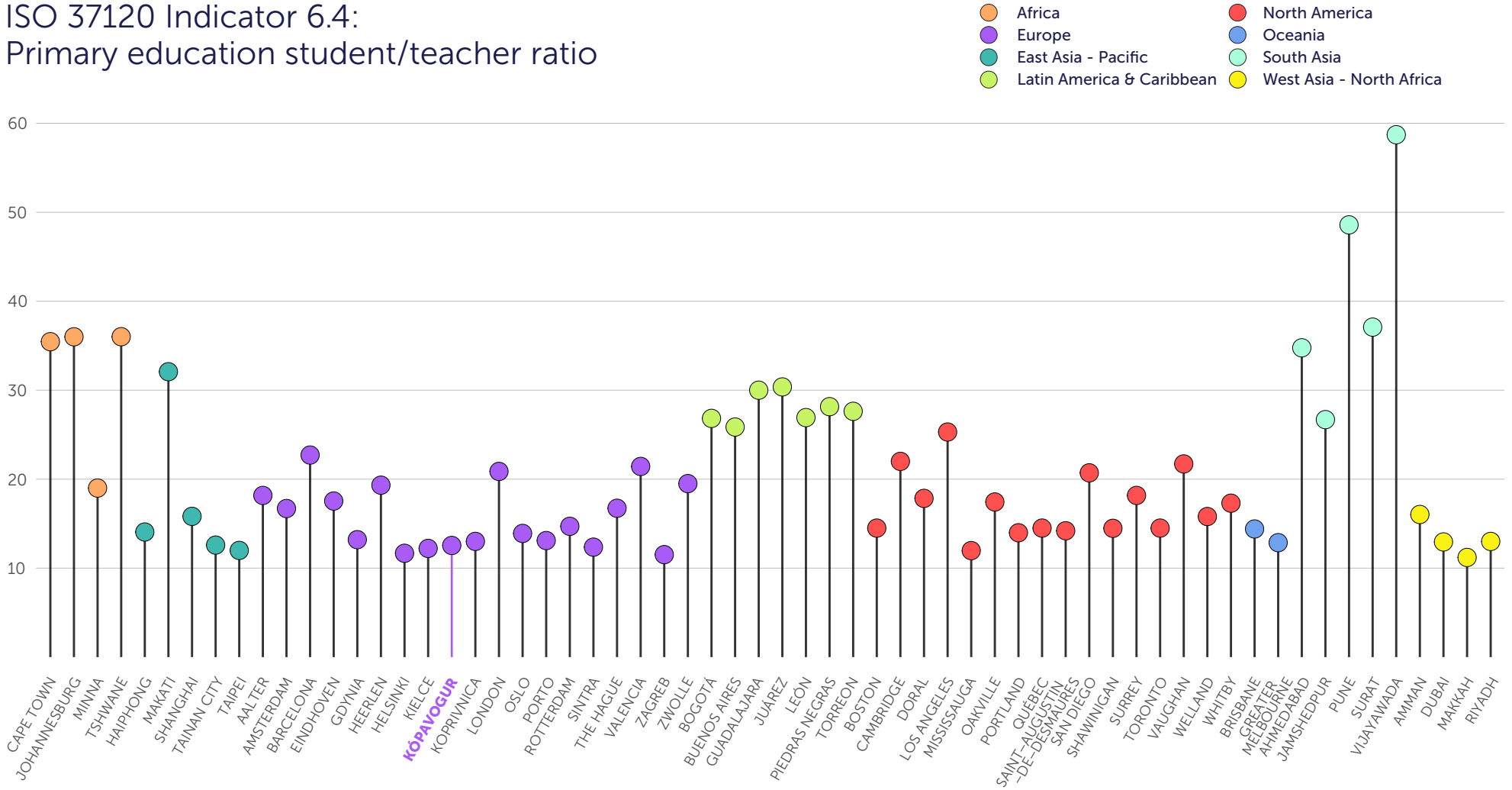

4
QUALITY
EDUCATION

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 4 – QUALITY EDUCATION

ENSURE THAT ALL COMPLETE QUALITY PRIMARY AND SECONDARY EDUCATION

ISO 37120 Indicator 6.4:
Primary education student/teacher ratio



WCCD | WORLD COUNCIL ON CITY DATA

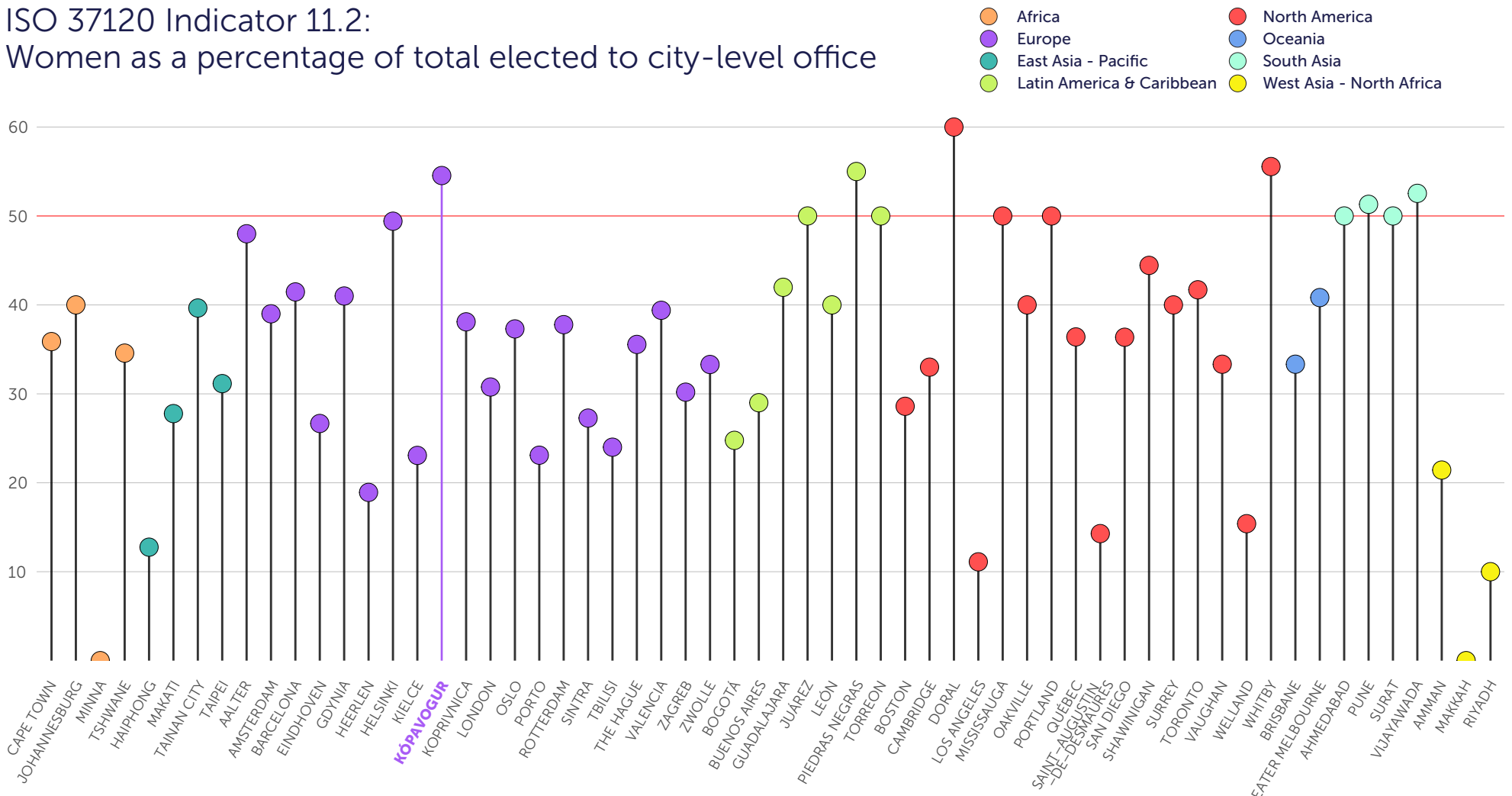

5
GENDER
EQUALITY

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 5 – GENDER EQUALITY

ENSURE WOMEN'S FULL PARTICIPATION

ISO 37120 Indicator 11.2:
Women as a percentage of total elected to city-level office



WCCD | WORLD COUNCIL ON CITY DATA

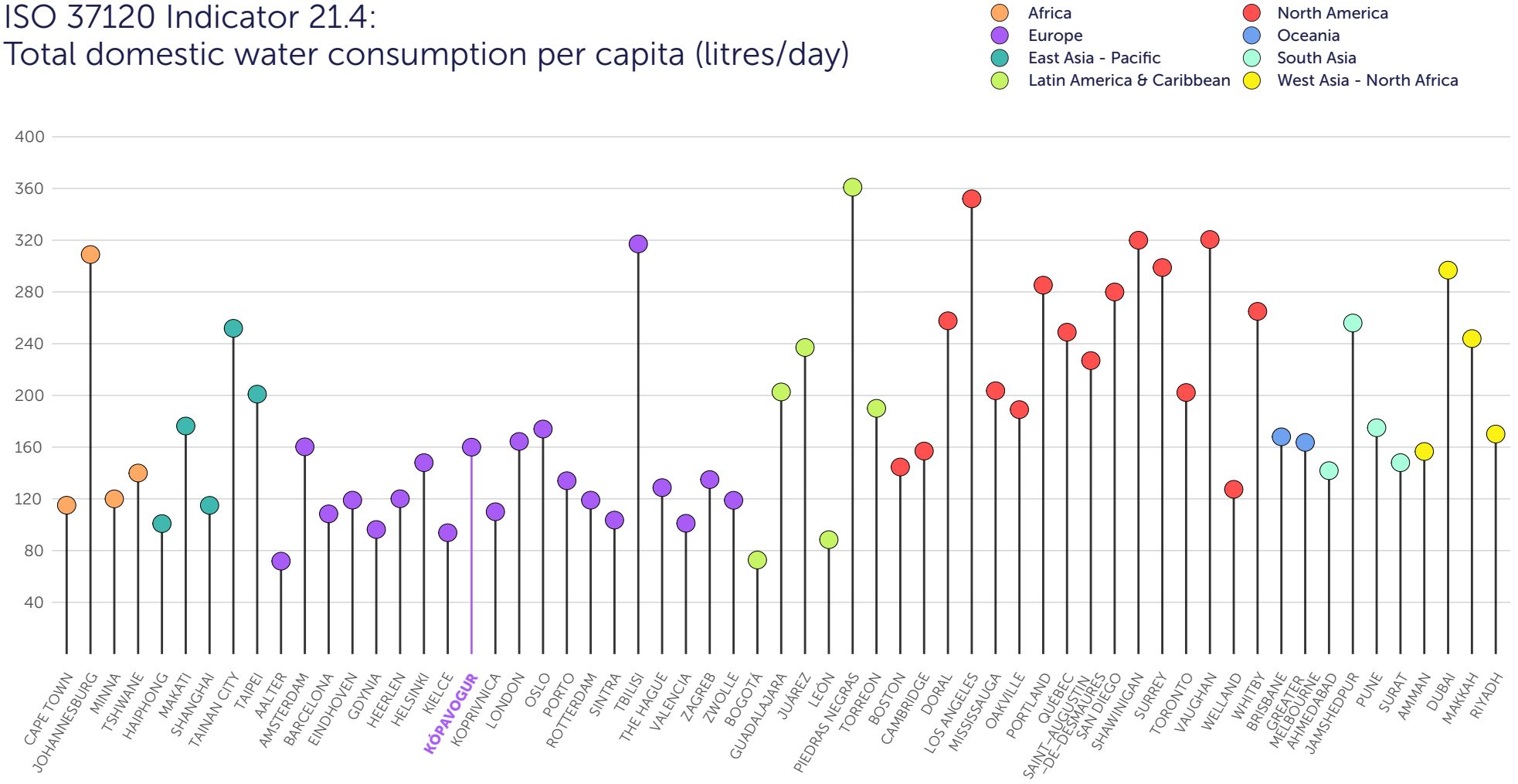

6
CLEAN WATER
AND SANITATION

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 6 – CLEAN WATER AND SANITATION

ACCESS TO SAFE DRINKING WATER

ISO 37120 Indicator 21.4:
Total domestic water consumption per capita (litres/day)



WCCD | WORLD COUNCIL ON CITY DATA

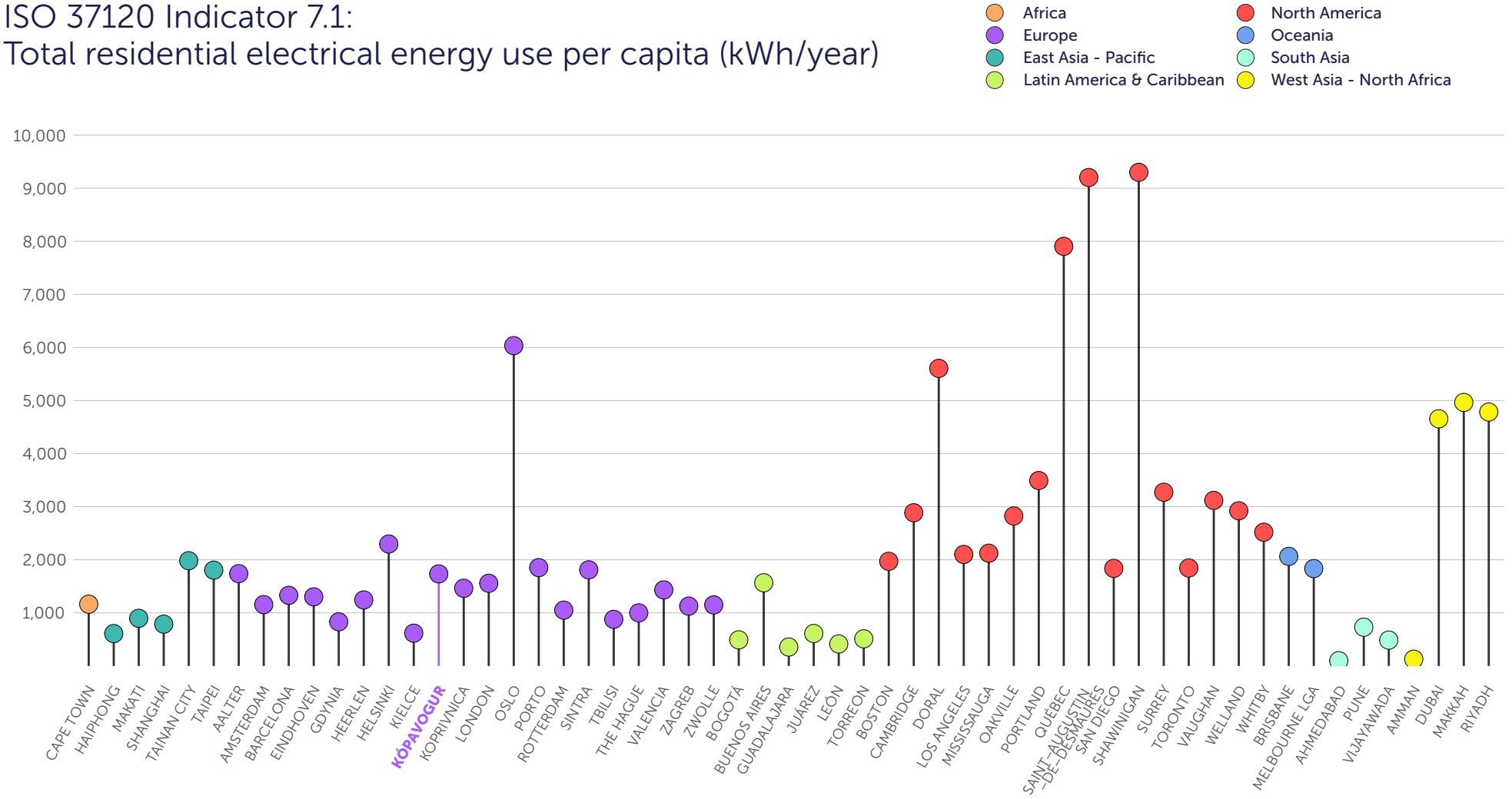

7
AFFORDABLE AND
CLEAN ENERGY

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 7 – AFFORDABLE AND CLEAN ENERGY

IMPROVE ENERGY EFFICIENCY

ISO 37120 Indicator 7.1:
Total residential electrical energy use per capita (kWh/year)



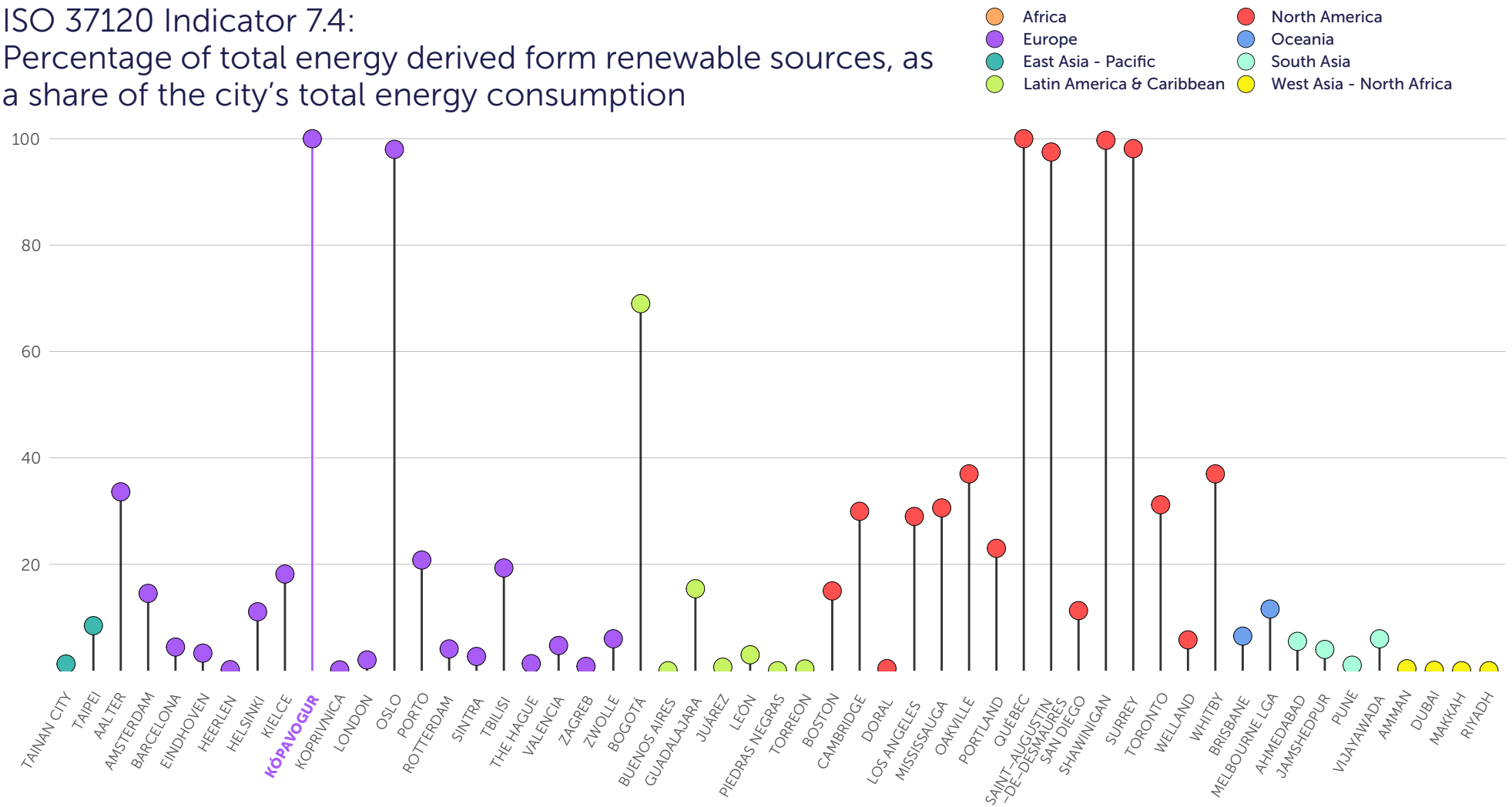
WCCD | WORLD COUNCIL ON CITY DATA

WCCD CITY DATA SUPPORTING SDG 7 – AFFORDABLE AND CLEAN ENERGY

WCCD SUPPORTS THE SDGS

INCREASE THE SHARE OF RENEWABLE ENERGY

ISO 37120 Indicator 7.4:
Percentage of total energy derived form renewable sources, as a share of the city's total energy consumption



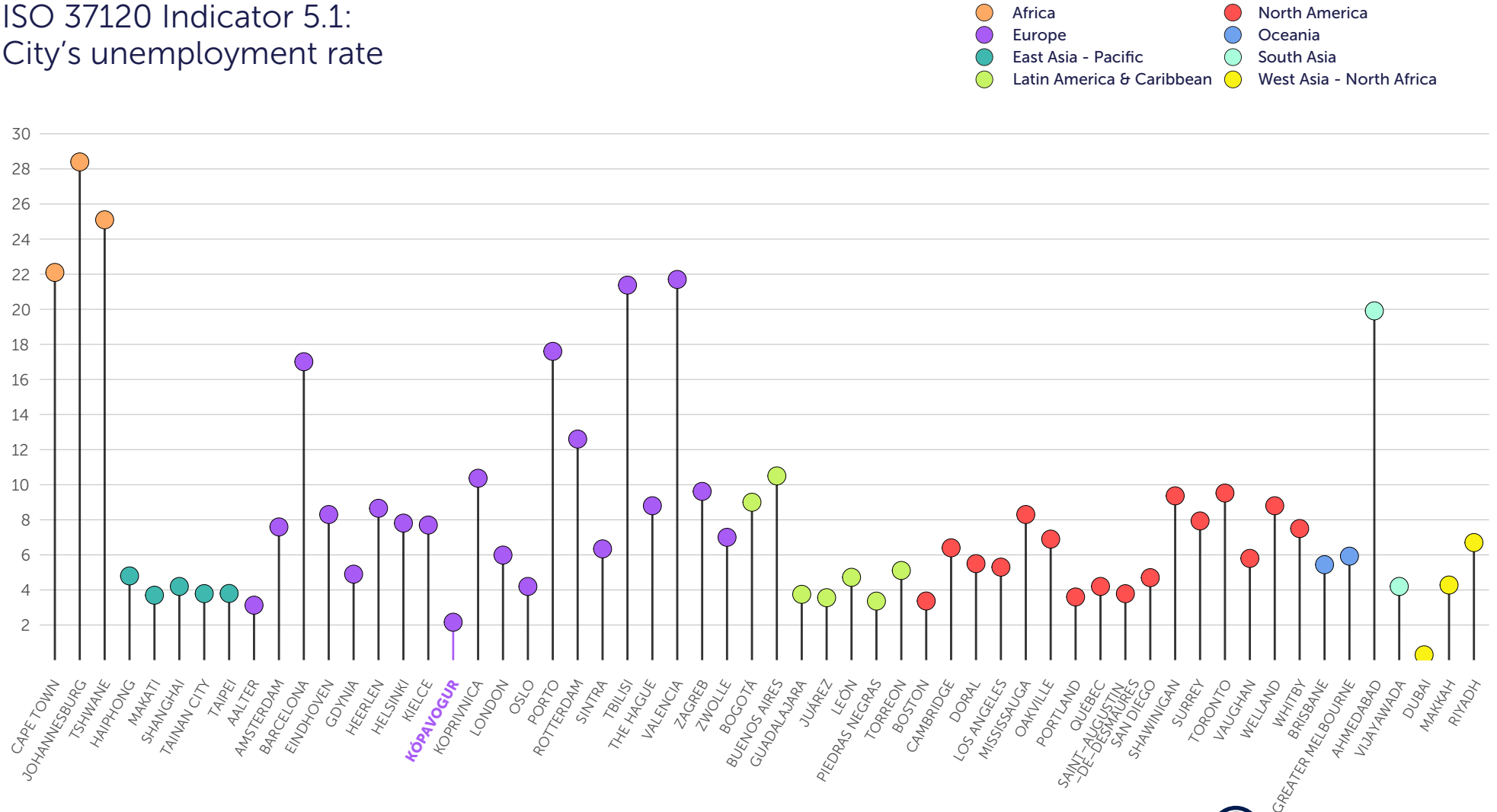

8
DECENT WORK AND
ECONOMIC GROWTH

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 8 – DECENT WORK AND ECONOMIC GROWTH

ACHIEVE FULL AND PRODUCTIVE EMPLOYMENT

ISO 37120 Indicator 5.1:
City's unemployment rate



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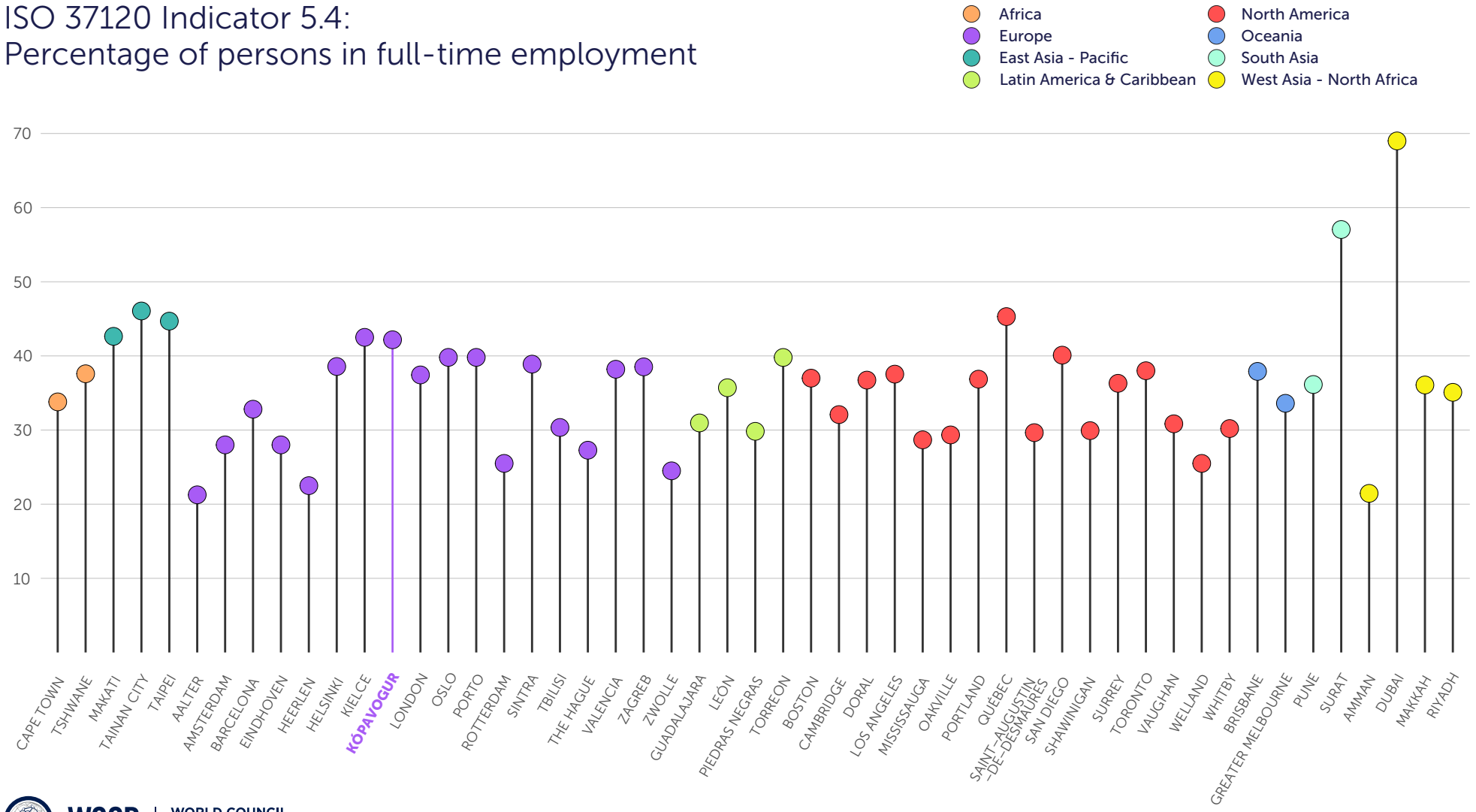
WCCD CITY DATA SUPPORTING SDG 8 – DECENT WORK AND ECONOMIC GROWTH

WCCD SUPPORTS THE SDGS

ACHIEVE FULL AND PRODUCTIVE EMPLOYMENT

ISO 37120 Indicator 5.4:
Percentage of persons in full-time employment



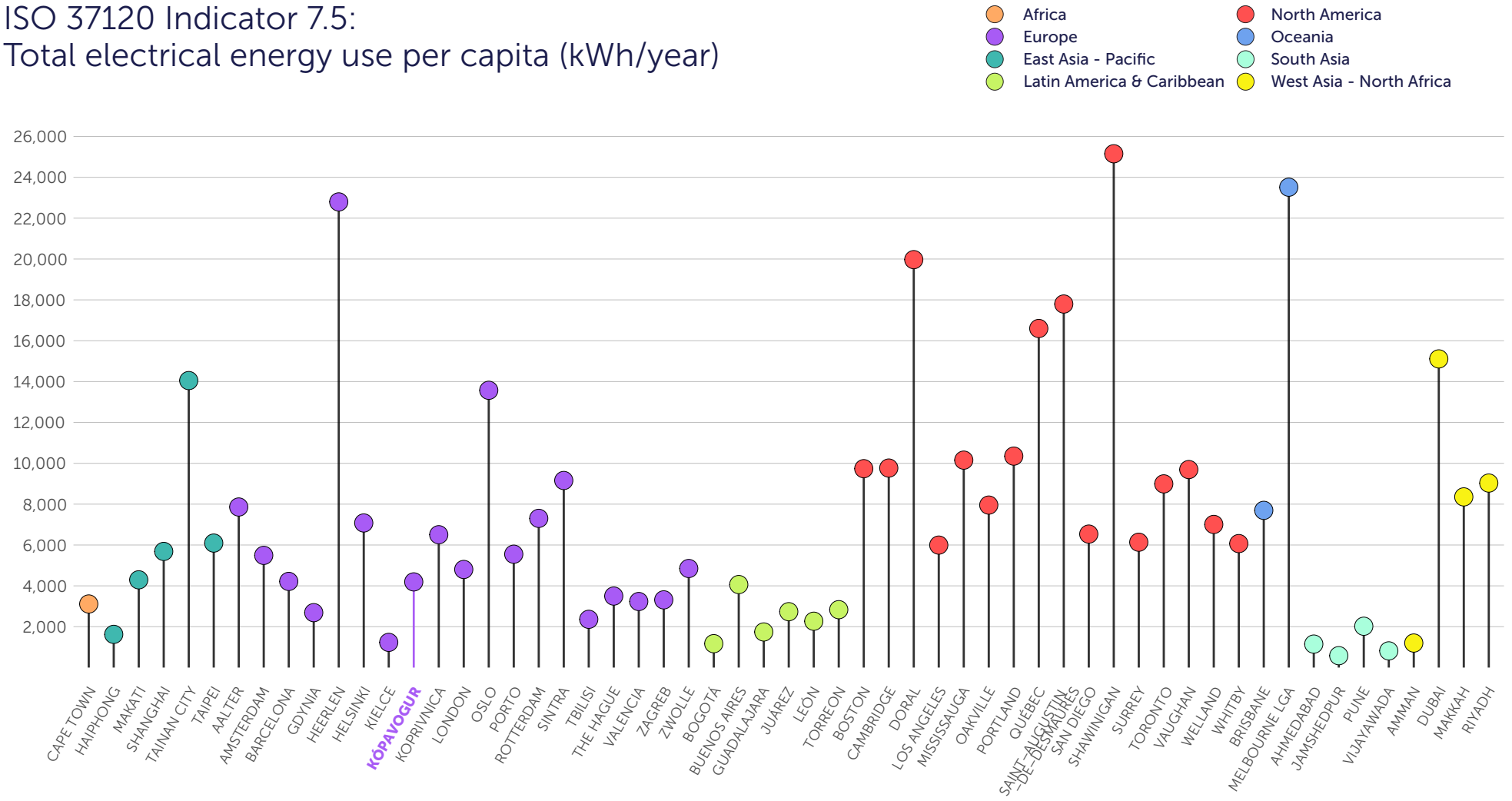

9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 9 – INDUSTRY, INNOVATION AND INFRASTRUCTURE

INCREASE RESOURCE-USE EFFICIENCY

ISO 37120 Indicator 7.5:
Total electrical energy use per capita (kWh/year)



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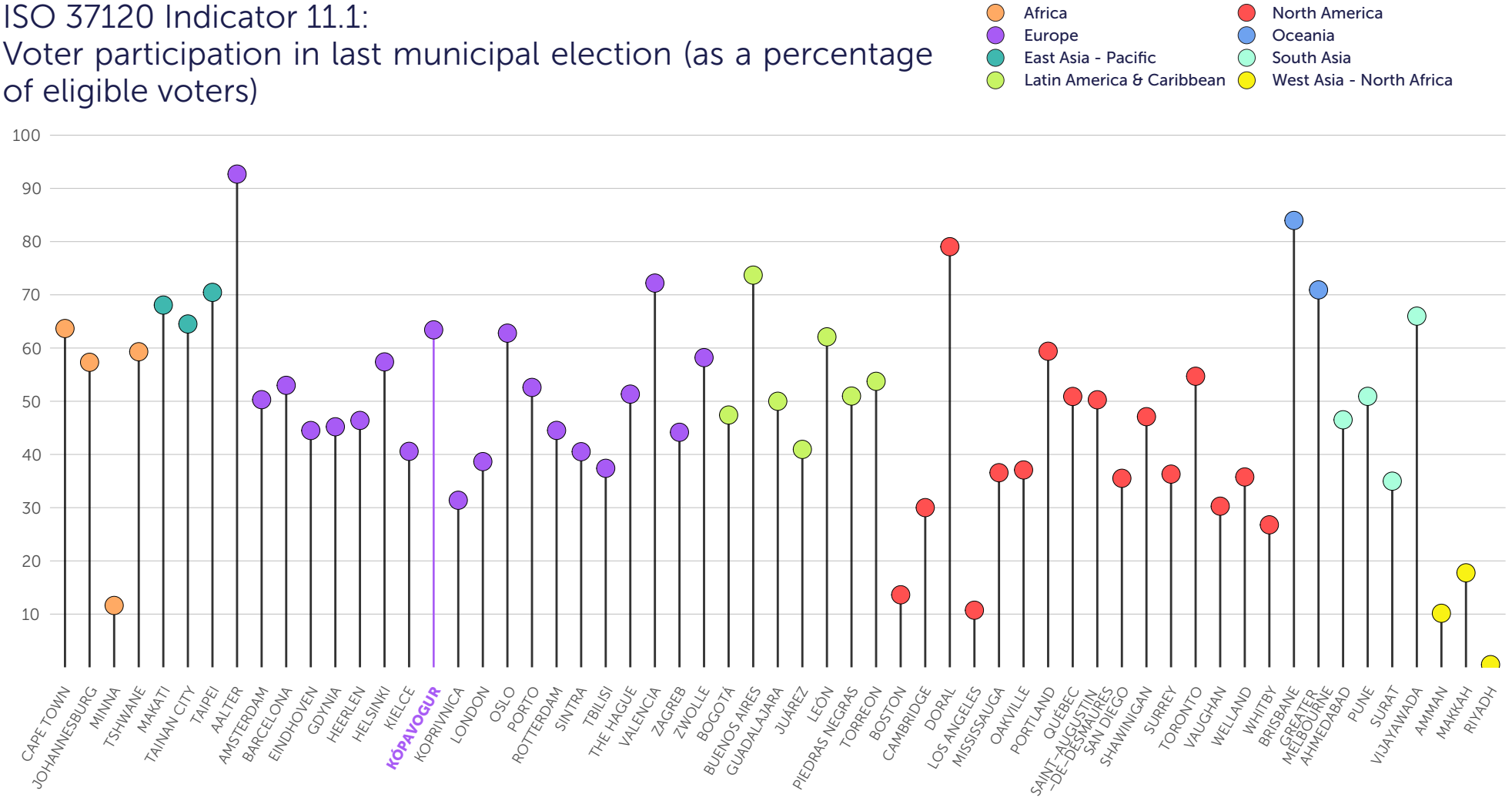
10
REDUCED
INEQUALITIES

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 10 – REDUCED INEQUALITIES

EMPOWER AND PROMOTE THE SOCIAL, ECONOMIC AND POLITICAL INCLUSION OF ALL

ISO 37120 Indicator 11.1:
Voter participation in last municipal election (as a percentage of eligible voters)



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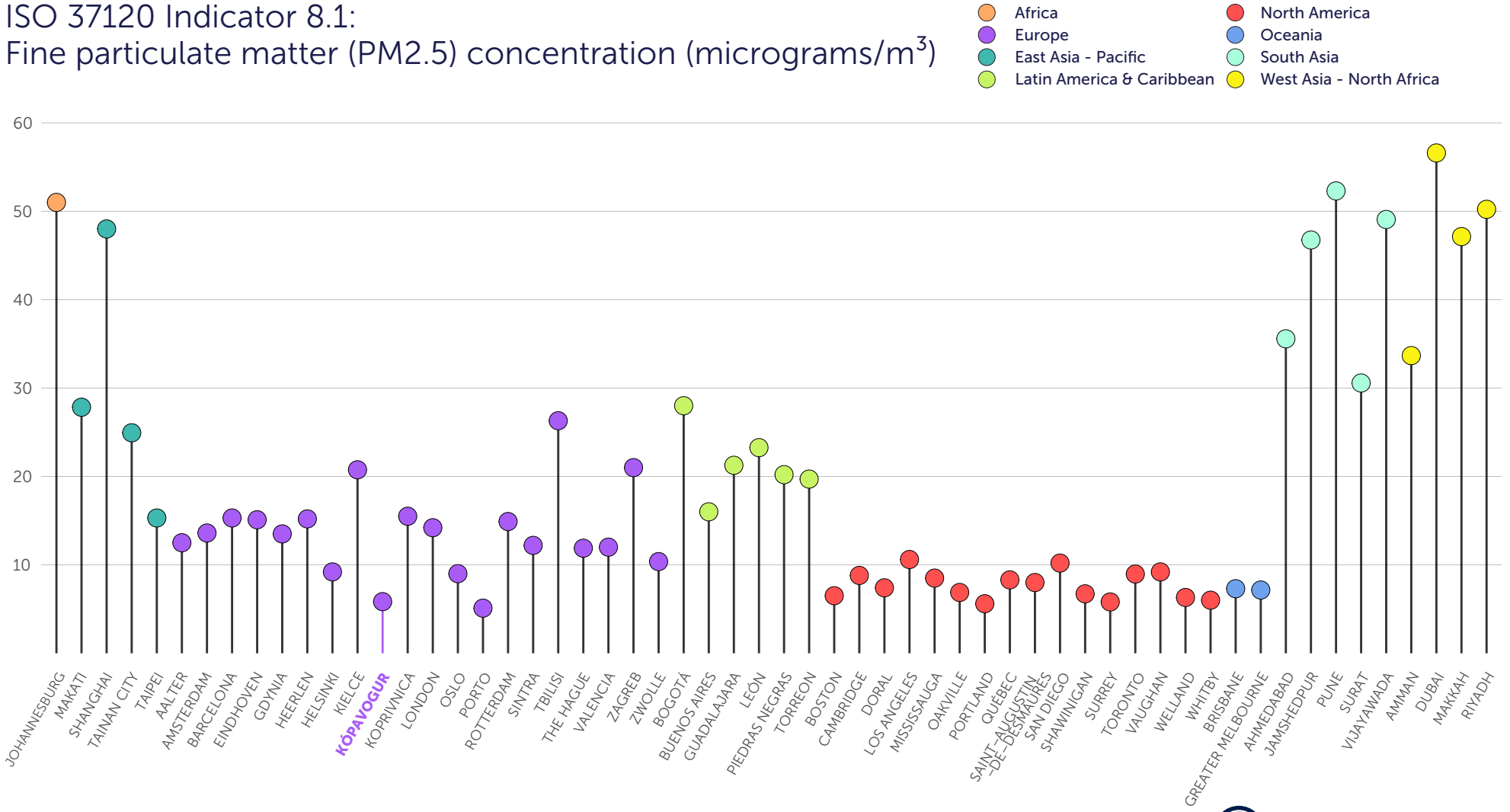
11
SUSTAINABLE CITIES
AND COMMUNITIES

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 11 – SUSTAINABLE CITIES AND COMMUNITIES

ENVIRONMENT OF CITIES - AIR QUALITY

ISO 37120 Indicator 8.1:
Fine particulate matter (PM2.5) concentration (micrograms/m^3)



WCCD | WORLD COUNCIL ON CITY DATA


ÍÞRÓTTAMIÐSTÖÐIN
VERSALIR
ÍÞRÓTTAMIÐSTÖÐIN VERSALIR

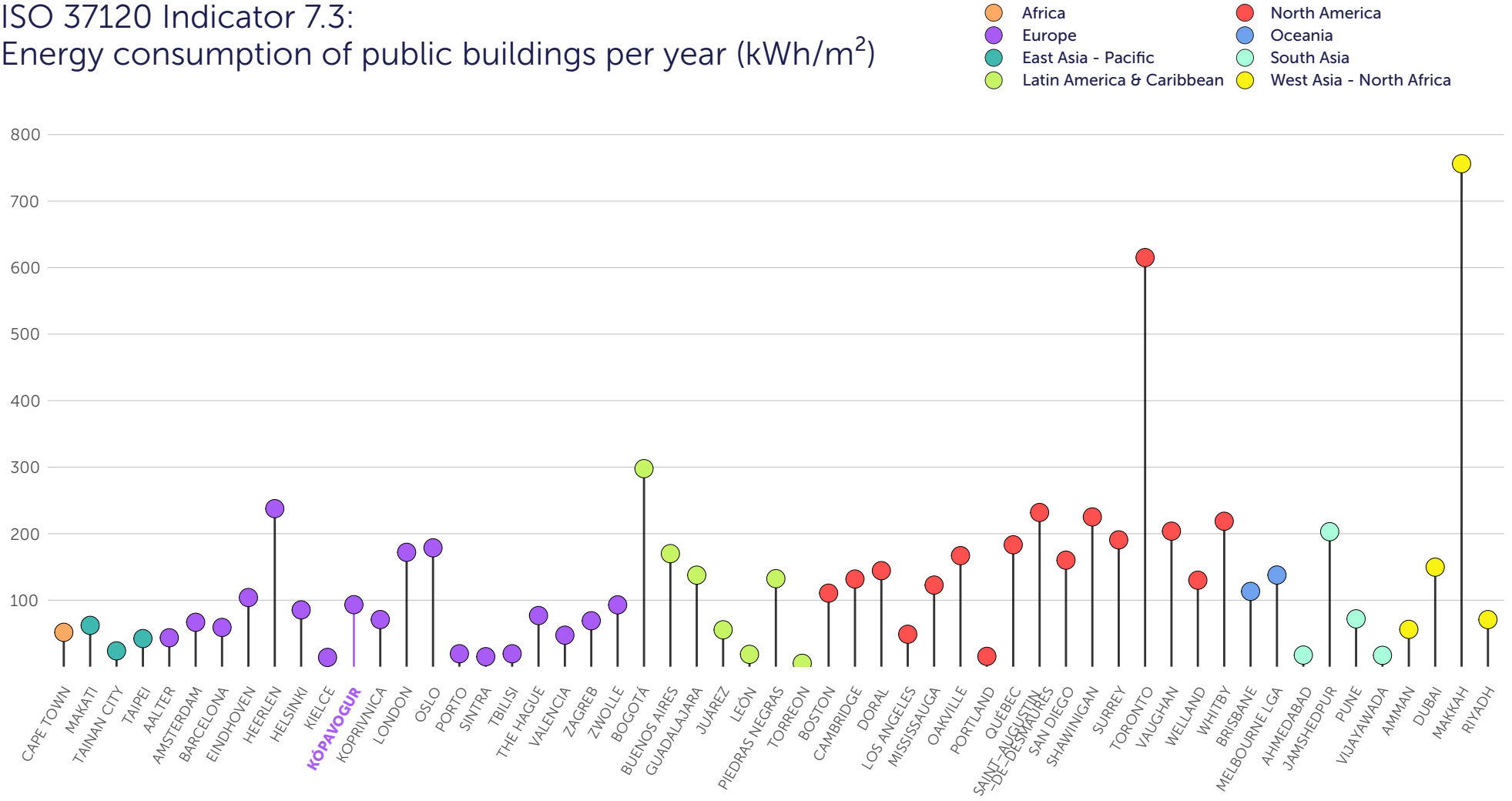

12
RESPONSIBLE
CONSUMPTION
AND PRODUCTION

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 12 – RESPONSIBLE CONSUMPTION AND PRODUCTION

SUSTAINABLE MANAGEMENT AND EFFICIENT USE OF NATURAL RESOURCES

ISO 37120 Indicator 7.3:
Energy consumption of public buildings per year (kWh/m²)



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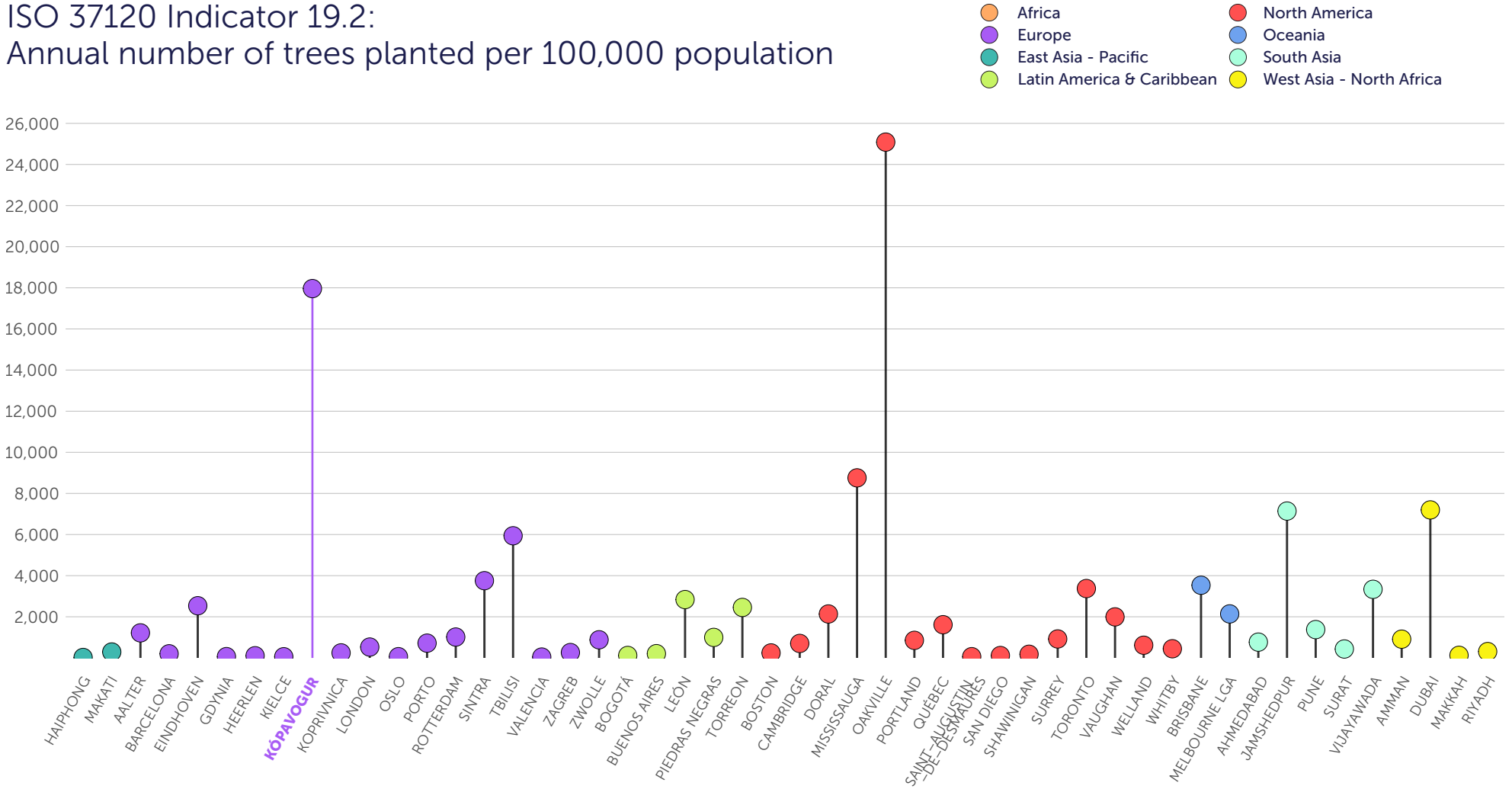
13
CLIMATE
ACTION

WCCD CITY DATA SUPPORTING SDG 13 – CLIMATE ACTION

FOSTER CLIMATE RESILIENCE

ISO 37120 Indicator 19.2:
Annual number of trees planted per 100,000 population



HOW GREEN IS MY CITY?

17963

Annual number of trees planted per 100,000 population

Kópavogur Iceland

ISO 37120

PLATINUM CERTIFIED

WCCD

2018

WORLD COUNCIL ON CITY DATA

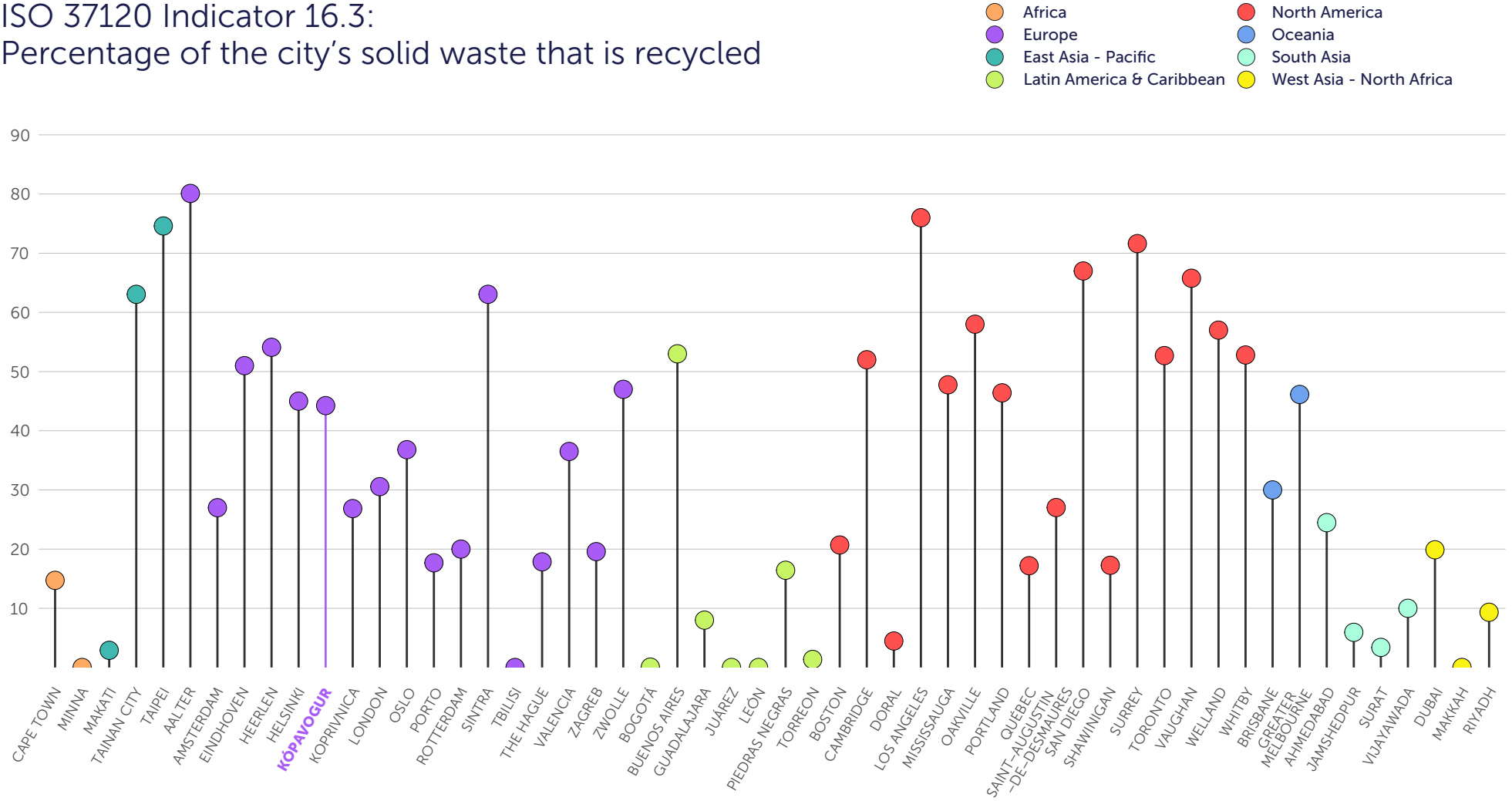

14
LIFE
BELOW WATER

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 14 – LIFE BELOW WATER

REDUCE MARINE POLLUTION FROM LAND-BASED ACTIVITIES

ISO 37120 Indicator 16.3:
Percentage of the city's solid waste that is recycled



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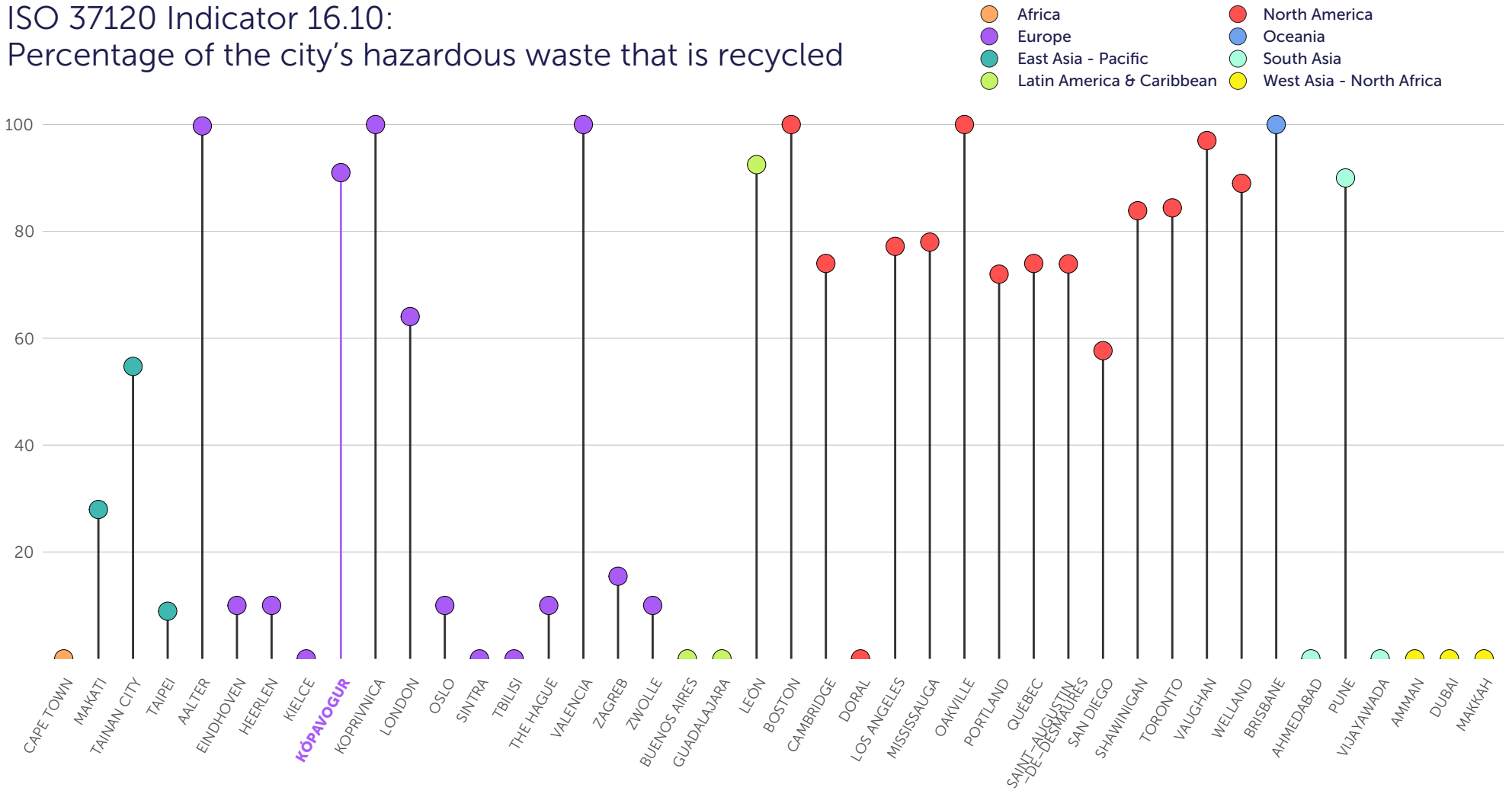
15
LIFE
ON LAND

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 15 – LIFE ON LAND

CONSERVATION, RESTORATION AND SUSTAINABLE USE OF INLAND FRESHWATER ECOSYSTEMS

ISO 37120 Indicator 16.10:
Percentage of the city's hazardous waste that is recycled



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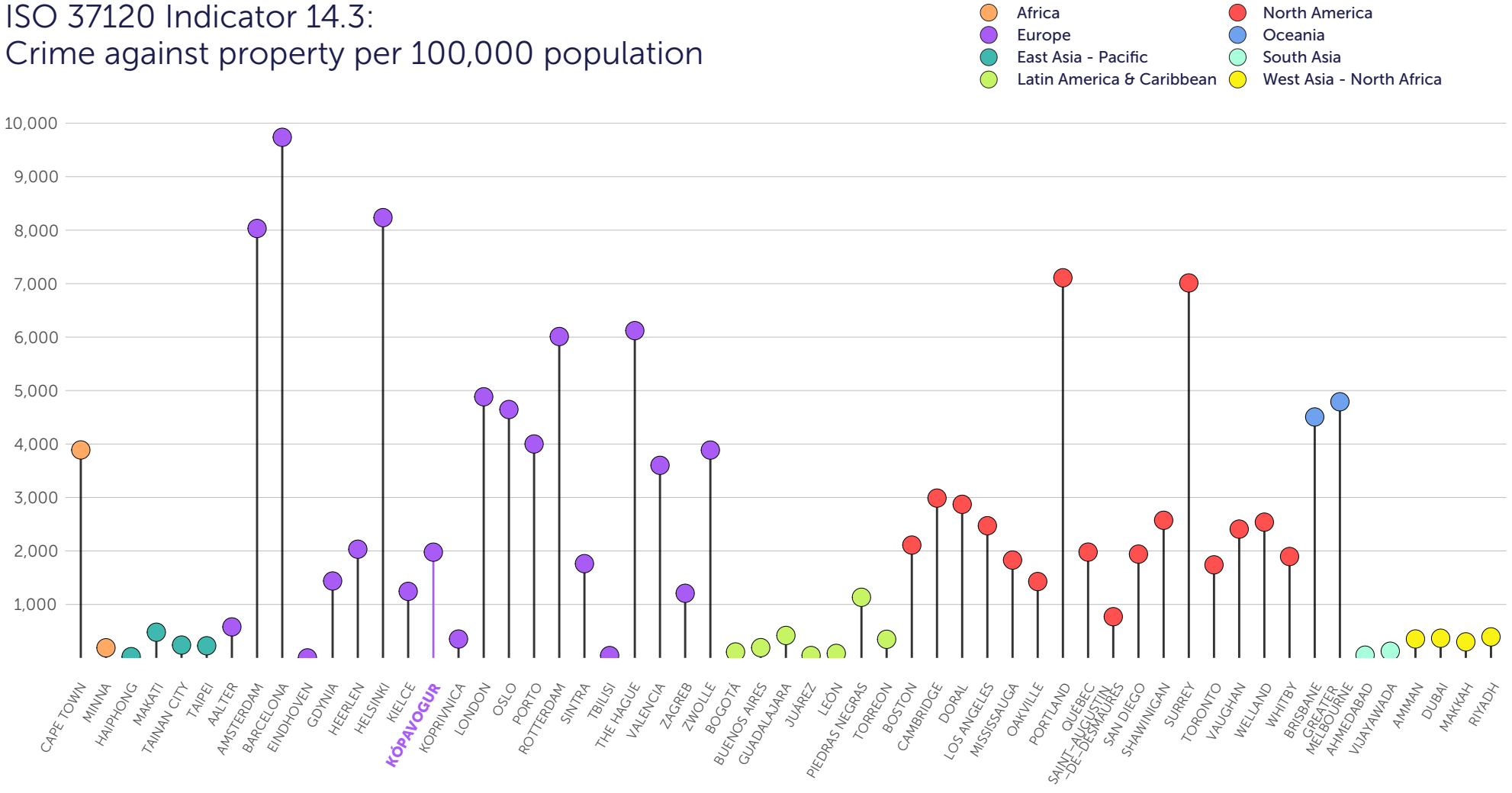
16
PEACE, JUSTICE
AND STRONG
INSTITUTIONS

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 16 – PEACE, JUSTICE AND STRONG INSTITUTIONS

REDUCE ALL FORMS OF VIOLENCE AND RELATED DEATHS

ISO 37120 Indicator 14.3:
Crime against property per 100,000 population



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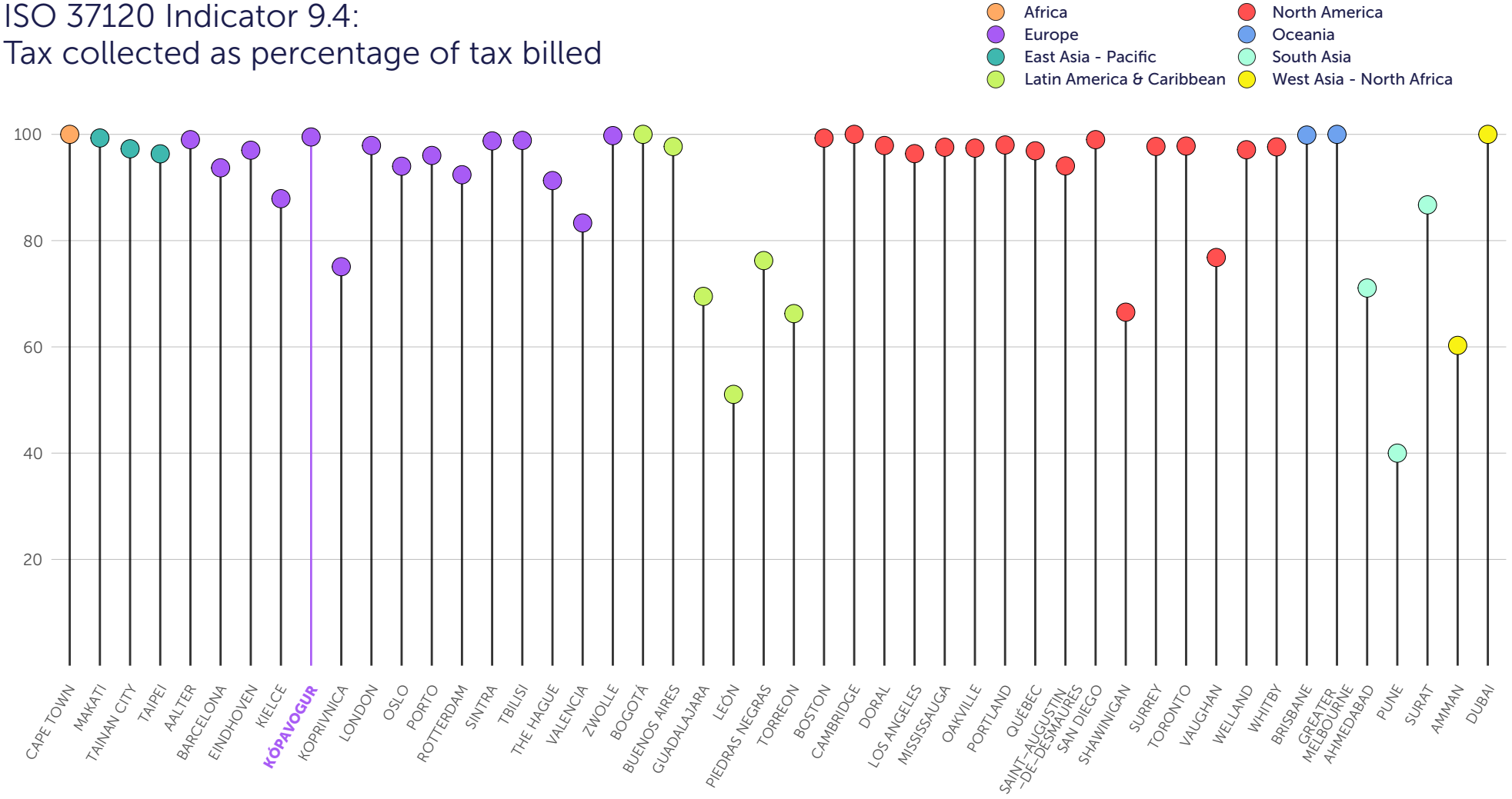
17
PARTNERSHIPS
FOR THE GOALS

WCCD SUPPORTS THE SDGS

WCCD CITY DATA SUPPORTING SDG 17 – PARTNERSHIPS FOR THE GOALS

IMPROVE DOMESTIC CAPACITY FOR TAX AND OTHER REVENUE COLLECTION

ISO 37120 Indicator 9.4:
Tax collected as percentage of tax billed



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KÓPAVOGSVÖLLUR

WCCD | WORLD COUNCIL ON CITY DATA