

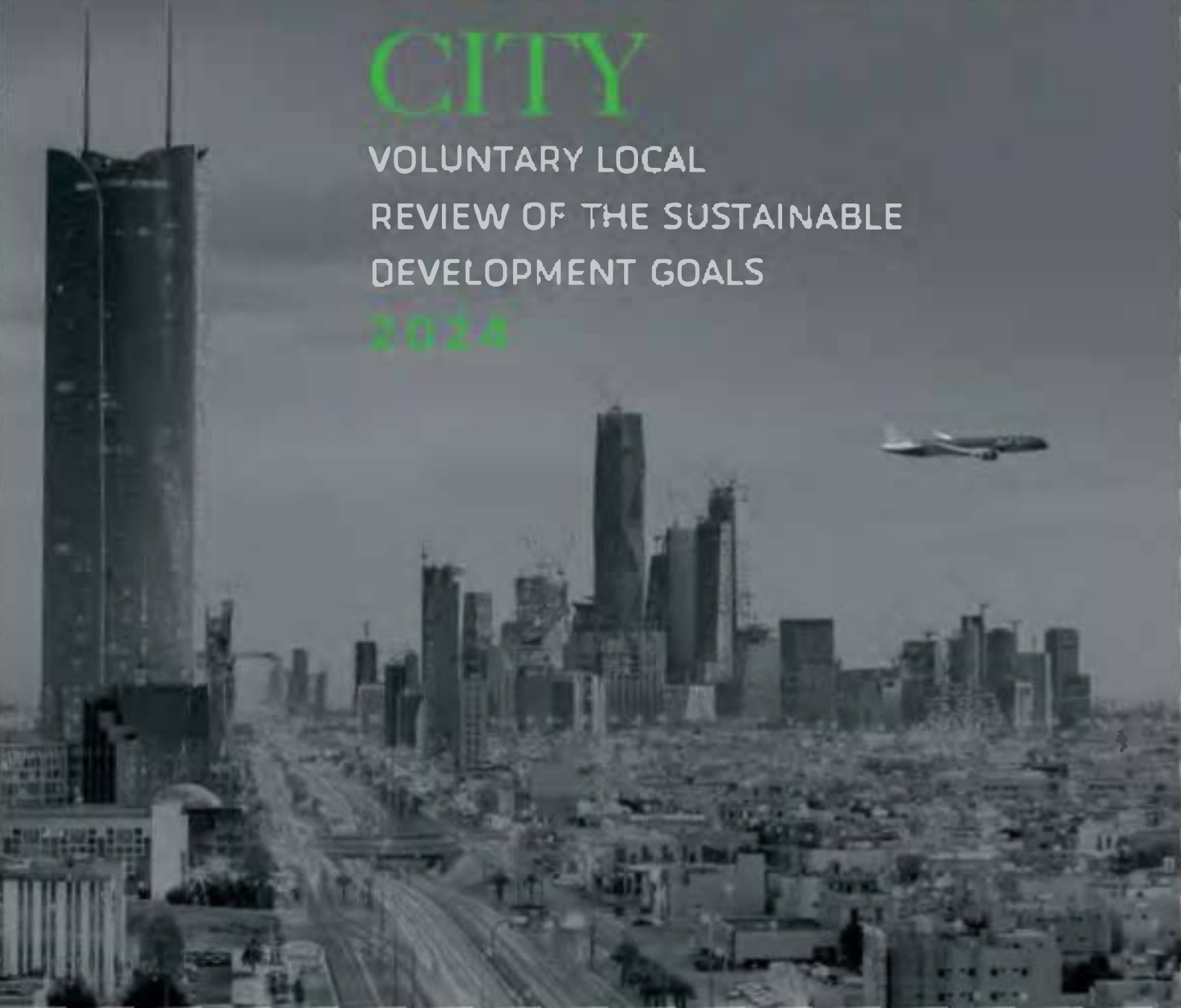


الهيئة الملكية لمدينة الرياض
ROYAL COMMISSION FOR RIYADH CITY



RIYADH CITY

VOLUNTARY LOCAL
REVIEW OF THE SUSTAINABLE
DEVELOPMENT GOALS
2024







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Riyadh City

Voluntary Local
Review of the Sustainable
Development Goals

2024





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CHAPTER ONE



1.1 Introduction

Embark on a transformative journey through the dynamic city of Riyadh as we explore the voluntary local review (VLR) , the sub-national review of the SDGs and Agenda 2030 implementation. Adopted in 2015, this global initiative introduced 17 SDGs supported by 192 countries, embodying a collective vision for a sustainable future.

In alignment with the core pillars of the United Nations' Sustainable Development Goals (SDGs) and Agenda 2030 (Planet, Prosperity, People, Peace, and Partnerships), the Saudi Arabia has been preparing Voluntary National Reviews (VNRs) as a mechanism for evaluating the nation's effort and accomplishments in achieving the SDGs.

In 2018, cities began submitting Voluntary Local Review reports. This innovative initiative gained momentum, with 100 cities joining the movement.

While the initial Agenda 2030 did not specify protocols for sub-national monitoring, the significance of local participation was underscored by the acknowledgment that 67% of the 169 Sustainable Development Goal (SDG) targets are either implemented or need to be implemented at the local level. The guidelines for Voluntary Local Reviews emphasise viewing it as both a dynamic process and a valuable end result that is engaging and informative.

This first report for Riyadh offers a comprehensive assessment of the city's advancements towards the 2030 Sustainable Development Goals. In its drafting, various workshops and coordination meetings were conducted with stakeholders in Riyadh to underscore the importance of active participation and to cultivate support for collaborative and coordinated initiatives.

1.2 National context

The launch of Vision 2030 in 2016 unveiled a comprehensive long-term plan with three pillars aiming to promote sustainable and inclusive development. The National Transformation Program, supported by 12 plans, prioritises infrastructure development to cultivate sustainable environments and facilitate transformation in Saudi Arabia.

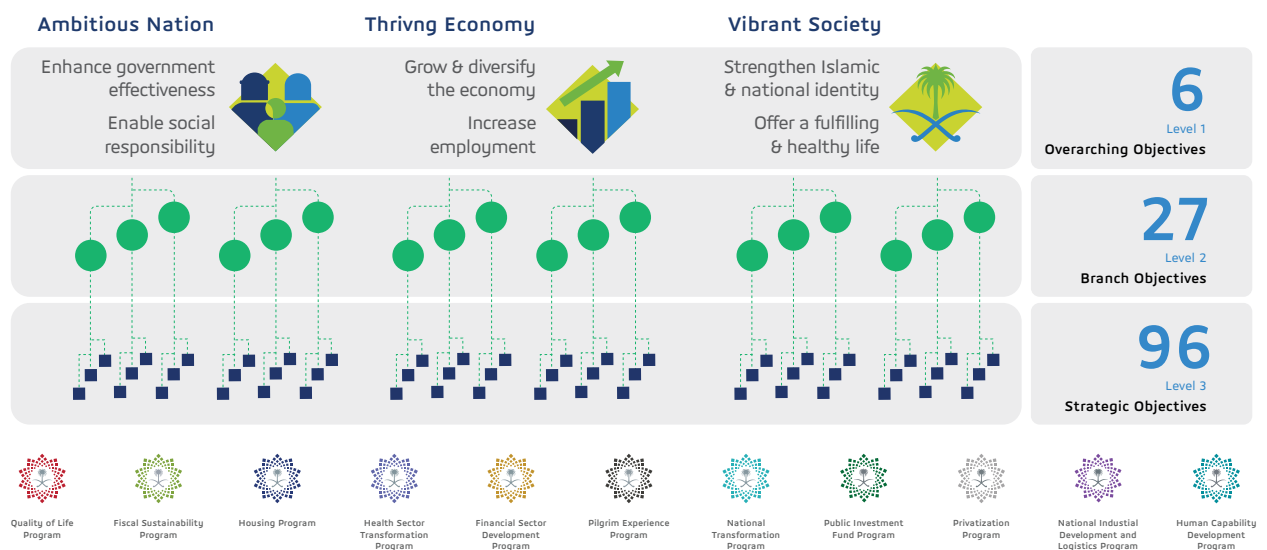
In 2022, Saudi Arabia improved its ranking in the UN's E-Government Development Index, demonstrating leadership in digital transformation and attracting international investments. The National Transformation Program has played a key role in empowering the private sector and enhancing the investment climate, positioning the Kingdom as an attractive investment hub, with Riyadh standing out as a key destination for investors.

Vision 2030 integrates sustainable development goals by localising SDGs through the establishment of the Sustainable Development Steering Committee. Saudi Arabia has emphasised sustainability in key national policies, issuing two Voluntary National Reviews - in 2018 and 2023 - and closely tracking progress on 116 indicators, and is committed in enhancing achievements in SDGs 14, 15, and 16 through initiatives such as the Saudi Green Initiative.



Saudi Arabia adopted a whole-of-society and whole-of-government approach making sure to ensure the leave-no-one-behind principle in order to give equal opportunities to all.

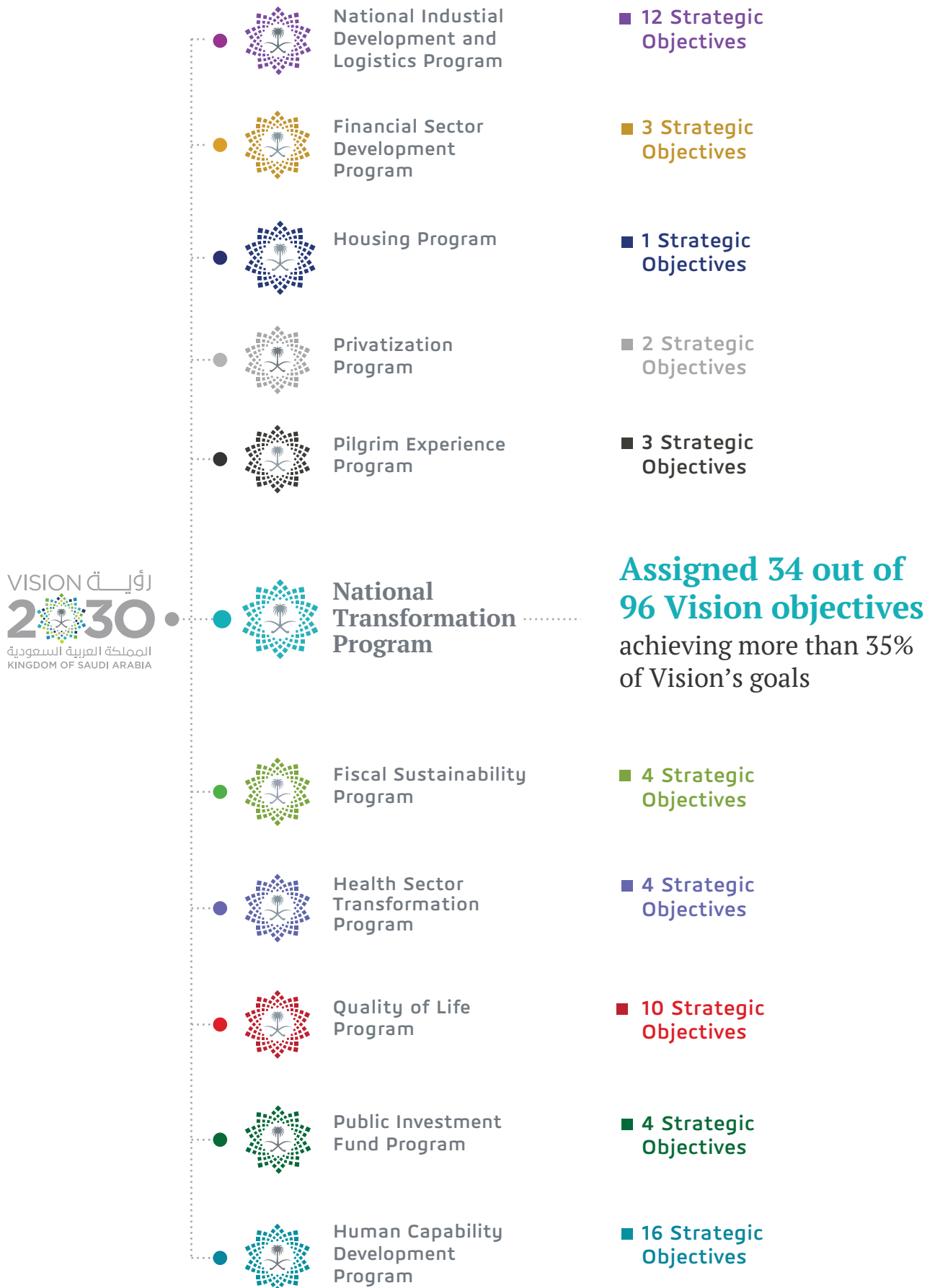
The Vision was cascaded into **strategic objectives** to enable effective implementation through Vision Realization Programs.





VISION 2030 IS UNDERPINNED BY CHANGE AND TRANSFORMATION THROUGH 12 NATIONAL PROGRAMS

National Transformation in Saudi Vision



1.2.1 VNR/VLR Integration

Riyadh First Voluntary Local Review aligns with Saudi Arabia's second Voluntary National Review, offering an opportunity to explore additional key messages and analyse local perspectives on opportunities and challenges outlined in the national review. The VLR utilised data collected during the National Review by national statistical authorities to produce subnational data, enabling the tracking of key indicators at a local level. For example, data from the nationwide 2022 Household Survey carried out by Gstat has been disaggregated to provide targeted insights for Riyadh city.

Both the Riyadh VLR and National VNR are in alignment when it comes to progress in meeting SDGs in areas such as Health, Education, Women's Empowerment, and partnerships. Overcoming obstacles requires integrating SDGs into Local policy frameworks, particularly through the use of data-driven policies to improve the national Review process for sustainable development. A systematic approach to regular SDG assessments would enable the collection of valuable insights that can be disseminated to other cities in Saudi Arabia exploring the adoption of a Voluntary Local Review.

In Riyadh City, the review of Sustainable Development Goals (SDGs) has been aligned with the national objectives of Vision 2030 to promote policy coherence and streamline multilevel governance. This synchronisation ensures the successful implementation of SDGs at the local level. Additionally, urban health policies have been coordinated with national priorities, particularly in response to the COVID-19 pandemic, leading to the seamless execution of crisis response measures in Riyadh city.

SDSC – The Sustainable Development Steering Committee:

Established through a Royal Decree in September 2021, SDSC is responsible for coordinating and monitoring the implementation of the SDGs across government agencies and other stakeholders. SDSC is comprised of representatives from 18 government entities and is headed by the Minister Economy and Planning. The committee works closely with these stakeholders to ensure that the country's efforts to achieve the SDGs are integrated and aligned with the broader goals and objectives of the Vision 2030 plan. SDSC is supported by an Executive Committee, an Advisory Board, and a Secretariat.

- **Executive Committee** – Comprised of representatives from key government agencies and stakeholders, the SDSC Executive Committee is responsible for overseeing the implementation of the SDSC's decisions and recommendations and ensuring that the country's efforts to achieve the SDGs are well-coordinated and integrated. The Executive Committee is responsible for reviewing and verifying recommendations and provides steering and guidance to the various working groups. It also provides regular reports to the SDSC on the status of the country's SDG efforts and makes recommendations for improvement.
- **Advisory Board** – The Advisory Board is responsible for providing advice and recommendations to the SDSC and its Executive Committee on the implementation of the SDGs. It is comprised of experts and representatives from various stakeholders, including academia, scientific community, the private sector, civil society organizations, and international organizations.

- **Secretariat** – The role of the Secretariat is played by the Ministry of Economy and Planning. The Secretariat is responsible for providing administrative and technical support to the SDSC and ensuring the implementation of its decisions and recommendations. It is responsible for the day-to-day operations of the SDSC and ensures that the committee's work is carried out efficiently and effectively. This includes the preparation of agendas and minutes of meetings, the coordination of inter-agency cooperation, and the provision of technical and analytical support to the SDSC. The Secretariat also plays a key role in monitoring and reporting on the progress of the country's SDG efforts. This includes the regular collection and analysis of data, the preparation of progress reports, and the dissemination of information to relevant stakeholders.
- **Working Groups** – Three sets of working groups have been established to support the sustainable development agenda in Saudi Arabia under the guidance of the Sustainable Development Steering Committee. The respective areas they cover are: Policy Development, Data and Reporting, and Strategic Enablers. They are composed of representatives from key government agencies and stakeholders, including the private sector, academia, civil society organizations, and international organizations. The working groups develop and implement strategies and initiatives to support the achievement of specific SDGs. They provide a forum for collaboration and coordination among stakeholders and a platform for exchanging information, sharing best practices, and developing innovative approaches to achieve the SDGs.

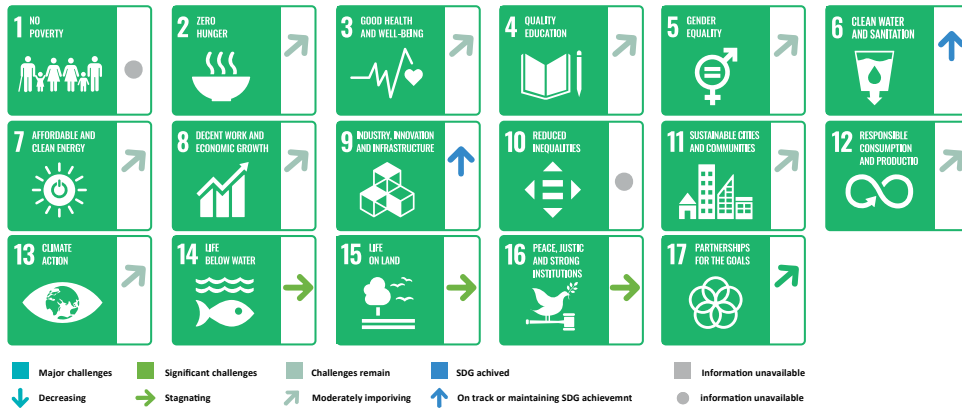


SUSTAINABLE DEVELOPMENT GOALS

VNR		VLR
- Progress in Health Indicators. - Exceptional policy ecosystem. - Strategic programs Digitization.	3 GOOD HEALTH AND WELL-BEING 	- Advancements in Health Indicators. - Health Services in Riyadh City aligns with national priorities. - Strategic Programs for Road Safety and Health Partnerships for Digital Transformation.
- Complete provision of education for the primary and secondary levels. - Launch of comprehensive transformational programs.	4 QUALITY EDUCATION 	- Provision of education across all educational levels. - Aspirations for transformation within a diverse educational sector.
Remarkable advancements in Women's Empowerment.	5 GENDER EQUALITY 	Implementation and execution of national policies through a dedicated program aimed at women's economic empowerment.
- Full access to clean water. - Sustainable management of water resources.	6 CLEAN WATER AND SANITATION 	Substantial advancements in water irrigation and the reutilization of treated water.
- Accomplishments in Energy Efficiency and Accessibility. - Advancements in Renewable Energy.	7 AFFORDABLE AND CLEAN ENERGY 	Launch of Energy Efficiency Initiatives.
- Expansion in Manufacturing. - Enhancements in Innovation Indices. - Exceptional Infrastructure.	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	- Focus on policies to enhance competitiveness. - Diversification of Riyadh's economy value into high-Value future focused economic sector. - Extensive infrastructure programs in Riyadh.
- Substantial endeavours towards creating inclusive, safe, and resilient cities. - Enhancement of urban development through infrastructure improvements, sustainable housing initiatives, and bolstering the resilience of cities and settlements against natural disasters. - Sustainable Urban Development is a key priority in national policies.	11 SUSTAINABLE CITIES AND COMMUNITIES 	- Riyadh has shown significant improvement in urban indicators. - Riyadh's committed sustainability strategy. - Riyadh Public Transport program. - Urban initiatives such as King Salman Park, Riyadh Sports Boulevard, and Green Riyadh.
- Economic diversification - International partnerships - Enhanced capabilities for data collection and monitoring.	17 PARTNERSHIPS FOR THE GOALS 	- Riyadh City's sector-specific approach to economic development. - Riyadh's pivotal role in the U20. - Riyadh City data ecosystem and the significance of the Riyadh Urban Observatory in data governance.

1.2.2 SDG Progress

The Sustainable Development Report, formerly known as the SDG Index & Dashboards, has recognized Saudi Arabia's achievements in meeting the Sustainable Development Goals. This independent global assessment tracks the country's progress in meeting sustainable development goals.



1.3 Riyadh City

Overview

In the mid-1990s, Riyadh's population was approximately 3.5 million, growing at a rate of 8%. This trend persisted, and by 2004, the population had reached 4.2 million, with growth rates fluctuating between 2% and 4%. According to conservative population projections, Riyadh is expected to have 10 million residents by 2030, assuming natural growth remains the primary factor. However, more ambitious projections suggest the population could reach 15 million, driven by the increasing attractiveness of the city.¹

Riyadh City has been settled on the Najd Plateau in the heart of the Arabian Peninsula for over 2,500 years. Its name itself reflects this history, with Arabic roots denoting natural fertility, particularly around Wadis - natural valleys that used to be waterways.²

Riyadh City, located 600 metres above sea level, boasts excellent connectivity to other urban hubs in the country, such as Jeddah and Dammam. The city has a dry climate, with cold winters and hot summers. Riyadh experiences low humidity and rainfall, averaging around 20 mm annually. Temperatures can fluctuate significantly between day and night, reaching 45 degrees in the summer and dropping to 12 degrees in the winter.

The oil boom in the 1980s led to Riyadh's economic growth, turning it into a thriving economic centre and a strong employment hub. In 2021, the Riyadh Region contributed approximately 50% of Saudi Arabia's non-oil GDP.³

Riyadh economy is characterised by a diverse range of economic sectors, such as manufacturing, real estate, services, finance, and commerce, playing key roles alongside the oil industry. In response to the Covid-19 pandemic, Riyadh emerged as a key healthcare hub, and mitigating adverse impacts of the pandemic. The city's industrial sector, concentrated in Riyadh City and Region, showcases a strong innovation and investment, with numerous factories contributing to its economic growth. Furthermore, Riyadh serves as a prominent regional hub for trade and commerce, attracting numerous regional headquarters. The tourism sector is on the rise, positioning Riyadh among the top 50 most visited cities globally, welcoming a total of 5.45 million foreign tourists.

- (1) RCRC
- (2) RCRC released a detailed study of Riyadh City geo-morphology as part of the Medstar - available to download on its website.
- (3) GStat 2022 - Riyadh Region GDP - check also MISA Riyadh region report.
- (4) SDG09 provides a detailed overview of the Industry within Riyadh City.
- (5) SDG17 includes an overview of the Regional Headquarters Program launched by RCRC.

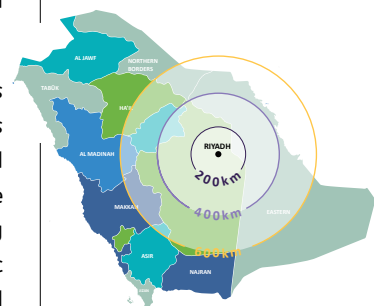


Figure 1
Map of Saudi Arabia with Riyadh City

The social development of the city is driven by the rise in job creation rates, with Riyadh outpacing other urban centres by a significant 30% in terms of cost efficiency. This factor has positioned the city as a focal point for attracting young talented individuals, further bolstered by the presence of leading universities and research centres within Riyadh.

The city's expansion is facilitated by an urban governance framework that harmonises the strategic and operational aspects of municipal progress with the national strategies initiated by governmental entities.

The two major entities that collaborate and synchronise the strategic and operational initiatives of the City are:

Royal Commission for Riyadh City (RCRC), founded in 1974, RCRC oversees and orchestrates both economic planning as well as urban development and growth through administering the comprehensive city plan. Sets strategic long-term strategies for the city in partnership with national entities and governs implementation of strategies and plans. RCRC also executes large-scale transformative capital projects in the city such as the Riyadh Metro, Wadi Hanifa Rehabilitation and coordinates city-level mega projects like King Salman Park and Sports Boulevard and others.

National, regional, and local authorities are represented on the board of the Royal Commission for Riyadh City (RCRC), the council of the



Riyadh Region Municipality (AMANA), and in the routine meetings convened by the Governor of the Riyadh Province.

(RCRC) leads, supervises, and orchestrates the city's development and ongoing transformation

The RCRC board is chaired by HRH Prince Mohammed Bin Salman (the Crown Prince and Prime Minister of KSA).

Riyadh Region Municipality – Amana is the municipal body in charge of Riyadh city and Region providing municipal services, building partnerships with the community and contributing to sustainable urban development –

headed by Prince Faisal Bin Abdulaziz Bin Ayyaf.

The Emirate of Riyadh Province⁶ serves as the official representation of the King within the province, tasked with upholding justice, security, and ensuring the delivery of essential services to all citizens. Additionally, the Emirate collaborates with local communities to incorporate their needs and demands into present and future development plans. The current governor is Prince Faisal bin Bandar bin Abdulaziz.

RCRC vision aligns with the national strategic program, Vision 2030, which guides sustainable development across the Kingdom.

(6) Ar-Riyadh province is located in the center of the country, making the region the largest in the Kingdom in terms of both area and population



1.3.1 Overview of Urban Growth

From a registration of population back to 1940 at a level of 50,000 people, the city has never stopped growing by phases.

There is a good correlation of the evolution of the population with the major events having paved the history of the last 50 years of the Kingdom of Saudi Arabia:

During the years 70-80 the population hits the million; it was the period of the first oil shock in 1973, foreign investment was entering rapidly in the country; it was the time Riyadh was starting elevating at the rank of a world capital-city:

This trend was just confirmed during the 80s until the year 1990 where the population reached 2 million for a growth rate between 10% and 15%, boosted by the second oil shock in years 1978-1981, the big projects for the city engaged by the government, themselves at the origin of the sudden increase of the employment capacity, therefore of the huge immigration movements.

Riyadh has Grown Exceptionally Over the Past 80 Years

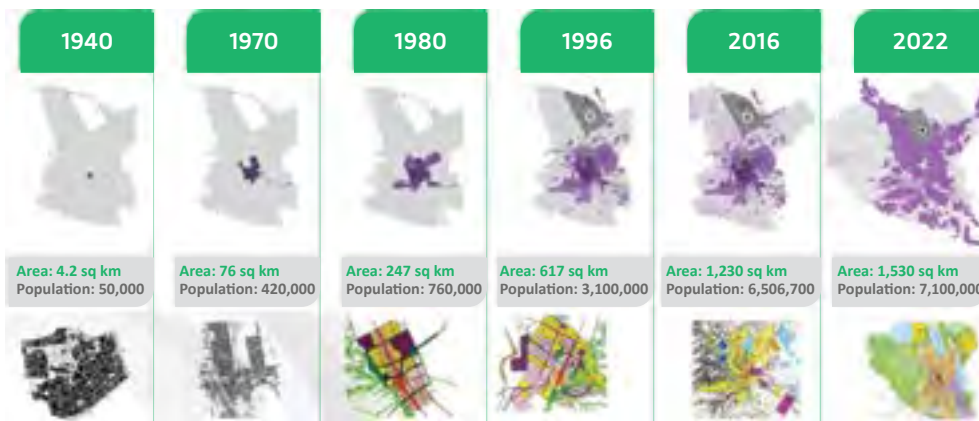


Figure 2
Riyadh Urban Growth 1940-now (Source RCRC 2023)

3,115

Total area, Km²

197%

Total area growth from 1985

With the city's expansion, the number of stakeholders in Riyadh have multiplied. Accordingly, the establishment of the Royal Commission for Riyadh City (RCRC) aimed to take the lead in urban development initiatives and forge partnerships to implement comprehensive city plans. Since the 1990s, RCRC has engaged with over 60 key stakeholders in its collaborative efforts to shape the city's development.

To date, the Commission has established partnerships with over

60 key stakeholders in the city.

1.4 Report Methodology

The Riyadh City Voluntary Local Review 2024 has implemented a comprehensive and systematic methodology to document the advancement of specific Sustainable Development Goals (SDGs) in

alignment with the standards outlined in the Voluntary Local Review guidelines established by multiple international entities.⁷

(7) VLR Guidelines part 1 and part 2 – UNHABITAT/ UNDESA/UCLG

1.4.1 Principles

Riyadh City Voluntary Local Review adhered to the principles of Voluntary Local Review – Informative, Transformative, Coherent, and linked to strategic Programs.

In-depth reviews aim to streamline analysis by integrating diverse sources to highlight not only quantitative advancements but also to provide tangible examples of specific programs and strategies being implemented by the city to address areas for improvement or accelerate progress. The Riyadh Voluntary Local Review has reaped the benefits of the localization of SDG indicators carried out by the Riyadh Urban Observatory, serving as a local data hub for the World Council on City Data (WCCD). The Riyadh Urban Observatory has been tracking urban indicators since 2013, enabling a historical analysis of certain metrics' progress. Additionally, concrete examples of transformative initiatives have been gathered to offer a practical overview of Riyadh City's advancement towards meeting the targets and addressing various dimensions of the SDG goals.

A comprehensive analysis was conducted in the VLR to align diverse stakeholder visions on SDG through innovative engagement strategies. A total of fifty city stakeholders were engaged through workshops to gather qualitative data, with surveys conducted in collaboration with statistical entities to assess the relevance of the SDGs to Riyadh residents. Furthermore, the review synthesised the collective efforts of various city entities in addressing key policy areas.

Adhering to the Leave-No-One-Behind principle, the Voluntary Local Review diligently ensured inclusivity. RUO initiated a comprehensive survey

targeting community feedback specific to the city, complemented by the arrangement of numerous workshops and consultations with Community Service Organizations. Particularly noteworthy were specialised workshops tailored for women, youth, the private sector, and individuals with disabilities, aimed at thoroughly reviewing and informing the analysis outcomes and policy suggestions. The valuable inputs provided by CSOs significantly contributed to the examination of the Sustainable Development Goals within the review process.⁸

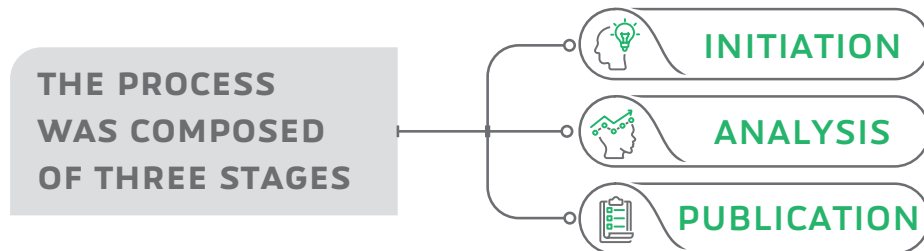
The concept of policy coherence in the VLR entails the harmonisation between the Voluntary National Review and the Local Reviews in accordance with the policy domains designated for each SDGs. Furthermore, the analysis highlights the interrelation of various sectors' strategies and programs. Specifically, Riyadh's Voluntary Reviews have explored into the national policy domains outlined in the Voluntary National Review, assessing the local authorities' responses through specific programs and initiatives launched by city stakeholders.

The Voluntary Local Review serves as a mechanism for monitoring and reporting, enhancing the use of evidence to inform sustainable development policies. Riyadh City Voluntary Local Review has generated a collection of urban indicators that will be monitored by the Riyadh Urban Observatory in cooperation with city stakeholders.

(8) Refer to list of stakeholders consulted during the preparation of the report

1.4.2 Process

The Voluntary Local Review Process has been tailored for Riyadh City, offering a flexible framework for systematically conducting reviews with sufficient touchpoints to facilitate the integration of VNR/VLR and coordinate essential community and stakeholder engagement forums.



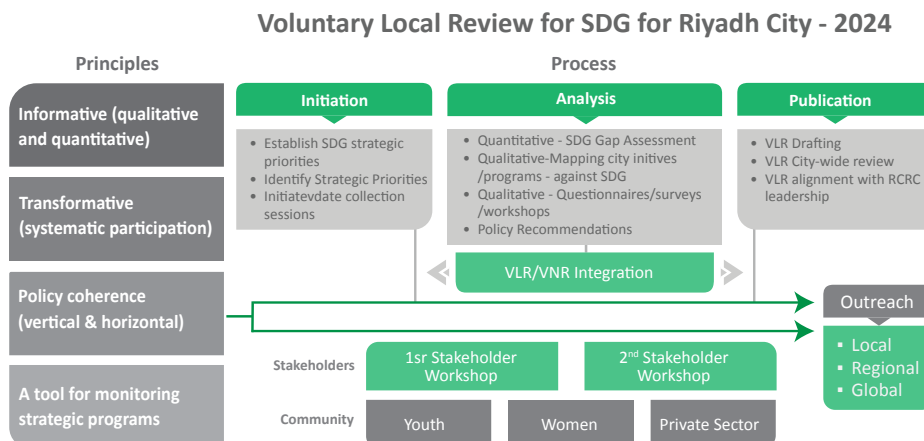
In the Initiation Phase, the VLR team deliberated on Riyadh City's priorities and facilitated the first Stakeholders Workshop, where consensus was achieved on the chosen SDG that aligns with the primary policy domains to be addressed in the 2024 report.

Extensive data collection efforts involved reaching out to over 60 stakeholders to establish working groups and gather information necessary for calculating indicators relevant to the designated policy sectors. The data collection process adhered to the Data governance framework implemented by the Riyadh Urban Observatory.

During the second phase, known as the Analysis stage, a gap assessment was carried out to evaluate the progress achieved so far. The analysis considered national policies through a multi-level

governance perspective that influenced the objective, such as the advancement of Women Empowerment in Riyadh City benefiting from promptly implemented National Reforms. Furthermore, Strategic Programs implemented at the city level by key stakeholders have played a significant role in achieving or expediting the progress towards these objectives. In policy areas where Sustainable Development Goal targets are still behind, recommendations for policy adjustments are put forth alongside feedback.

The dissemination and publication of the report entails a final review by city stakeholders, encompassing public, private, and civil society sectors, to enrich the final document with diverse perspectives and insights.



FIRST WORKSHOP

Voluntary Local Review of SDG 2030

To measure the progress of achieving Riyadh City's Agenda 2030, the first interactive workshop to monitor SDGs 2030 was held in the RCRC, in the attendance of several governmental entities, the private sector, and Civil Society organizations who are directly connected to SDGs and partners of RUO.



The workshop aims to:

- Coordinate on multiple levels all related qualitative and quantitative data.
- Exchange ideas and accomplished success stories in the context of efforts related to achieving SDGs.

Know the mechanisms of target achievements and support creative ideas in the same specialty of sustainable development The workshop focused on: Good health and well-being, good education, gender equality, and creating

local sustainable cities and communities, as an example of general SDGs for the United Nations. The event has also monitored Saudi economic strength in focusing on rapid economic recovery in Riyadh City after the Covid-19 epidemic.

The discussion has addressed the exerted efforts to achieve international quality standards to access clean water and sanitation, clean and affordable energy, industry, innovation, and infrastructure, and make partnerships to achieve goals.



Female attendees

Attendees



Total participants



Academic entities



Non-profit entities



National entities



Sub-national entities

Stakeholder representation

The participating entities

Academic entities	Non-profit entities	National entities	Sub-national entities
• Princess Nourah Bint Abdulrahman University • Prince Sultan University	• Princess Al Anoud Charitable Foundation • King Khalid Foundation • Mawaddah Association For Family Stability	• Saudi Energy Efficiency Center • Ministry of Human Resources and Social Development • Ministry of Municipal and Rural Affairs • General Entertainment Authority • Diabetes Center • Ministry of Energy • Ministry of Finance • Ministry of Commerce • Saudi Ministry of Justice • Saudi Central Bank • Control Helth C • Interior Ministry Agency for Civil Affairs • Public Health Center • King Abdulaziz City for Science and Technology (KACST) • Communications, Space and Technology Commission • Dialysis Center/ Unit • Saudi Red Crescent Authority • Dental Center • General Directorate of Civil Defense • Saudi Exports Development Authority • Saudi Energy Efficiency Center • The Small and Medium Enterprises General Authority "Monsha'at" • Ministry of Investment	• Riyadh Traffic • Riyadh Chamber • The Ministry of National Guard Health Affairs • Riyadh Airports Company • Diabetes Center • Riyadh Region Police

Recommendations of the first workshop of Riyadh City's VLR of SDG 2030:

The workshop was an important pillar in the Voluntary national report, and for cooperation with partners in Riyadh City, as well as for discussing and understanding the city's issues, and trying to find solutions for all threats affecting the transformation process of Riyadh City.

1. The convenience of working on goals 3, 4, 5, 6, 7, 9, 11, and 17 in Riyadh City's VLR 2023, and adding the rest of the goals in the next years' reports, sorted by priority.
2. Study future trends of SDGs and its consistency with the strategic goals of Riyadh City.
3. Create a smart e-platform for RUO containing Riyadh City's SDGs with development partners, to support data-based general policies.
4. Develop and activate partnerships as an accelerator for sustainable development in Riyadh City.
5. Document success stories from all partners periodically, and develop a mechanism to monitor them through specialized work teams for each SDG.
6. Hold workshops related to women, youth, and the private sector, and their contribution to sustainable development in Riyadh City and its implementation of the 2030 agenda.
7. Evaluate the effect of Riyadh's major projects on progress toward achieving SDGs.
8. Develop a correctional plan for each goal after issuing the report and coordinate them with partners' plans.
9. Develop a plan to monitor the implementation and evaluation of SDGs including society and youth awareness, policies evaluation, issuing reports for decision-makers, and common mechanisms with stakeholders.



1.4.3 Selected SDG

Aligned with Vision 2030 and in anticipation of significant regional developments. This comprehensive strategy will inform a report on the seventeen Sustainable Development Goals to be completed within the next two years.

In preparation for the 2024 Voluntary Local Review (VLR), a stakeholder workshop comprising over 40 city stakeholders identified eight Sustainable Development Goals for the ongoing review cycle:

SDG03 and SDG04, focusing on healthcare and education, underscore the significance of these two critical sectors for the progress of Riyadh Developments. This aligns with Vision 2030 priorities aimed at reforming the national healthcare and education systems.

SDG 09 and SDG 11, which address industry, innovation, infrastructure, and Sustainable Cities, underscore Riyadh's role as a pivotal national hub and strategic urban centre. This is complemented by the strategic programs currently being implemented by the city.

SDG 05, as reflected in the 2023 Voluntary National Review (VNR), underscores the commending progress that Saudi Arabia has made in enhancing the regulatory and institutional framework for wom-

en's empowerment. These advancements have significant implications for Riyadh City, the most populous urban centre in the nation.

SDG 06 and SDG 07, focusing on Water and Energy, play vital roles in Riyadh's journey towards becoming a sustainable city. These sectors are closely linked to the ambitious Riyadh City Sustainability strategy, demonstrating the integration of national priorities into local planning initiatives.

SDG17 underscores the significance of partnerships as the foundation of Riyadh City's development narrative, particularly given Riyadh's status as the headquarters for a majority of development agencies, non-profit organisations, and Civil Society Organizations engaged in sustainable development initiatives in the Kingdom of Saudi Arabia.

The chosen SDG encompasses the five pillars of Agenda 2030: people, prosperity, planet, partnerships, and peace. It includes a variety of localised Sustainable Development Goal implementations that can provide valuable insights for other municipalities/cities.

Our selected SDGs for Riyadh City's VLR



Figure 6
Selected SDG
-Source RUO 2023

1.4.4 Report Structure

The report comprises four sections derived from an internal assessment carried out by the VLR2024 team, focusing on the latest Voluntary Local Reviews and aligning with the VLR guidelines and the key objectives outlined in the 2023 VNR submitted by the Saudi Arabia Sustainable Development National Committee.¹¹

The first section will offer a comprehensive background and contextual understanding of the SDG evaluation for Riyadh City, presenting an outline of the national-level SDG initiatives and their relevance to Riyadh City. The section will give an overview of the city's significance, evolution, and detail the methodology employed in the report.

The second section will delve into each of the SDGs by conducting a quantitative evaluation of the progress made in selected indicators identified relevant to Riyadh City. This will be based on the indicators endorsed by the Riyadh Urban Observatory as the city's Local Data Hub, and will encompass the relevant indicators reported at a national level.¹² Additionally, bespoke initia-

tives have been introduced for each SDG to support and enhance the execution of Agenda 2030. Following the analysis, tailored recommendations have been formulated for each SDG, which will inform the forthcoming review cycle.

The third section focuses on Saudi Arabia's coordinated response to the Covid-19 pandemic, directed by the Ministry of Health and executed at a local level by various city authorities through dedicated crisis management committees. Riyadh successfully addressed the Covid-19 crisis with effective measures that demonstrated strong indications of recovery.

The fourth section summarises the key messages of the report, formulates a series of recommendations aimed at improving evidence-based reporting, monitoring, and subsequent actions, concluding with a set of conclusions to guide the next review cycle.

(11) RCRC represents Riyadh City in the committee and also participated in the HLPF2023 through the different contributions that the national KSA delegation organized and mainly the Sustainable Cities Side event co-organized with the Quality-of-Life Program

(12) Saudi Arabia VNR 2023 – Insert link for English version



Section	Contents
Context and background	• Preface & Introduction • SDG at a national level • Riyadh City • RCRC & Riyadh city's main stakeholders • Methodology
SDG-specific Chapters – organized into themes	• Chapters based on the SDGs • Quantitative analysis of progress towards the SDGs • Qualitative analysis of progress towards the SDGs • Feedback and insights from stakeholders • Areas identified for targeted improvements
Covid-19 Recovery and Response	• Key communications points • Riyadh's management of the COVID-19 pandemic: implemented measures and adopted policies. • Success stories in policy implementation • Insights for other urban centres
Policy recommendations	• Summary of key messages • Identifying areas for improvements Reporting, and monitoring for future VLRs

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Riyadh City VLR 2024 list of contents – Source RUO?
RCRC 2



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CHAPTER TWO

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2.1 SDG 03 – Good Health and Well-Being

By the year 2030 Riyadh is committed to promoting healthy lives and overall well-being for all individuals across all age¹ groups

- By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.
- By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortality to at least as low as 25 per 1,000 live births.
- By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases.
- By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.
- Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.
- By 2020, halve the number of global deaths and injuries from road traffic accidents.
- By 2030, ensure universal access to sexual and reproductive healthcare services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes.
- Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all.
- By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination

(1) UNStats- 2023 SDG Indicators Framework - SDG Indicators - SDG Indicators (un.org)



2.1.1 Assessment of Healthcare Provision in Riyadh City

The national government has identified the health sector as a top priority, as it represents 14.5% of total national expenditures in 2022.² The Ministry of Health is taking the lead at the national level with an ambitious National Transformation Program aimed at expediting the digital transformation of healthcare systems in order to effectively serve the needs of a diverse population.

Within the framework of Vision 2030, the government has allocated over 65 billion USD for the enhancement of physical healthcare infrastructure and the expansion of private sector involvement in the provision of healthcare services. This is to be achieved through a national program aimed at establishing 290 hospitals and 2,300 healthcare centers.

(2) VNR 2023 Saudi Arabia

THE RIYADH SECOND HEALTH CLUSTERS HAS 46 PRIMARY CARE CENTERS

46

Health Sector Progress

Saudi Arabia has shown considerable advancement in enhancing maternal health, as evidenced by a **reduction in the maternal mortality ratio** from 14 deaths per 100,000 live births in 2014 to 11.9 in the latest available data.

In 2019, **98.7%** of deliveries were overseen by skilled professionals, and **60.1% of women in their reproductive years** had their modern family planning requirements addressed. The health outcomes for children under five vary based on gender, nationality, and the timeframe of observation.



UNDER-5 MORTALITY RATE:
10.5/1,000 live births (2022)



NEONATAL MORTALITY RATE:
2.42/1,000 live births (2022)



NEW HIV INFECTIONS:
0.04/1,000 uninfected population (2022)



INCIDENCE OF TUBERCULOSIS:
1.8/100,000 population (2022)



SUBJECTIVE WELL-BEING:
6.4 (average ladder score, 0-10 scale, 2021)



SURVIVING INFANTS WHO RECEIVED 2 WHO-RECOMMENDED VACCINES:
95% (2020)

Table 1

National Health Improvements - Source VNR 2023

Maternal Mortality Rate

As of 2022, Riyadh has a maternal mortality rate of 4.5 per 100,000 live births, which is lower than the national average of 11.9. This lower rate can be attributed to the improvements in the healthcare system and the strategic deployment of skilled midwives for childbirth. Riyadh City boasts a high number of trained medical professionals, with an average of 28.9 doctors per 10,000 residents in 2023, comparable to cities One of the highest global rates.

Since 2013, Riyadh City has been implementing a public services program in collaboration with the Ministry of Health and the Health Affairs unit of Riyadh City to develop an annual strategy for healthcare services. This collaboration has played a key role in improving the overall health outcomes in the city.

Neonatal and Children Mortality

In 2022, the neonatal mortality rate in Riyadh was recorded at 5.2 deaths per 1,000 live births, significantly lower than the global average of 31. This positive outcome is attributed to the effectiveness of immunization and prevention programs initiated by the Ministry of Health, with vaccination rates reaching 95% for WHO-recommended vaccines in 2020.

Under-5 mortality rate for children in Riyadh City was 6.6 per 1,000 live births in 2022, consistent with the national indicator of 7.0 per 1,000 live births in 2020. This alignment highlights the accessibility of preventive measures through both on-site and virtual platforms. It is noteworthy that the provision of various online services and consultations has also played a role in enhancing this indicator.



Communicable and Non-Communicable Diseases

Riyadh recorded low rates of infection with infectious diseases. In 2022, the incidence of measles was 0 per 100,000 of the population, and at the national level, new HIV infections per 1,000 of the population reached 0.028. The Ministry of Health is currently overseeing the surveillance of communicable diseases at a national level. As outlined in the

2023 VNR, substantial efforts have been implemented nationwide to address Tuberculosis through early detection, with a particular focus on migrants from high-risk countries. Furthermore, early hospitalization³ through the detection of HIV via liver diseases⁴ is also being considered.

(3) For more Information check Saudi Arabia VNR 2023

(4) NON-Communicable disease include cardiovascular diseases, cancer, diabetes, and chronic respiratory disease

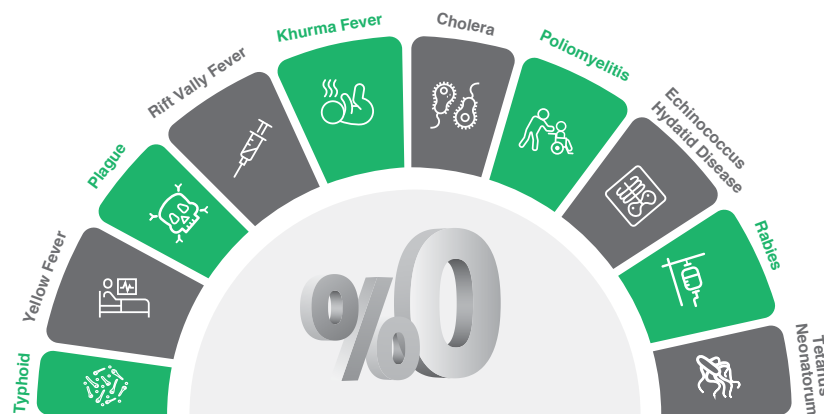


Chart 1

Source: MOH 2022

During the year 2022, no case of the following diseases was reported: Cholera, Poliomyelitis, Khurma Fever, Echinococcus Hydatid Disease, Rift Valley, Fever Plague, Rabies, Tetanus Neonatorum, Yellow Fever and Typhoid.

In terms of non-communicable diseases, it remains a major contributor to mortality nationally. The average life expectancy in Riyadh is approximately 74.9 years,

which is comparatively lower.⁵ Factors influencing this could be attributed to higher rates of obesity, prevalence of smoking, and respiratory diseases

(5) RUO Urban Indicators 2023

Smoking

In the 2019 survey, it was found that the weighted prevalence of tobacco smoking in Saudi Arabia was 11.6 percent, with 9.4 percent being daily smokers and 2.2 percent being occasional smokers. The highest percentage of current smokers was observed in the age group of 30–44 years. Urban populations showed a higher prevalence of current tobacco smoking, with rates increasing alongside the education level. Daily smoking was most prevalent in the lowest wealth quintile at 11.7 percent, while occasional smoking was most common in the

wealthiest quintile at 3.8 percent.⁶

The Royal Commission for Riyadh City and the Ministry of Health are collaborating on the establishment of an early warning system aimed at alerting individuals with chronic diseases on the appropriate precautions to take during dust storms. The implementation of this system is expected to diminish the volume of patients requiring medical attention due to respiratory conditions associated with dust exposure.

(6) Alqunaibet, Ada, Christopher H. Herbst, Sameh El-Saharty, and Abdullah Algwizani, editors. 2021. Noncommunicable Diseases in Saudi Arabia: Toward Effective Interventions for Prevention. Washington, DC: World Bank. doi:10.1596/978-1-4648-1717-5. License: Creative Commons Attribution CC BY 3.0 IGO

Obesity

Based on 2020 data 4.1 percent Prevalence of malnutrition : Overweight (weight for height : $>+2$ standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age), with 7.4 percent showing a predisposition towards obesity. Significant gender disparities were observed,

with boys exhibiting higher rates of both overweight and obesity. Both overweight and obesity demonstrated a yearly rise. Presently, there is a lack of data regarding obesity and overweight prevalence among children and adolescents in Riyadh City.

Specialty	Riyadh	Saudi Arabia	%
Public Health Center	447	2,390	18.7 %
Anti-smoking clinic	72	494	14.6 %
Hospital	49	484	17.3 %
Dialysis Center/ Unit	37	204	18.1 %
Diabetes Center	4	39	10.3 %
Dental Center	3	42	7.1 %
Cardiology Center	1	11	9.1 %
Oncology Center	1	4	25.0 %
Rehabilitation Center	1	14	7.1 %
Control / Regional Laboratory	1	13	7.7 %
Control Helth Centers at entry points	1	28	3.6 %
Forensic Medicine Center	1	20	5.0 %

Table 1

List of specialized Centers in Riyadh City

Source: MOH 2018 MOH 2022

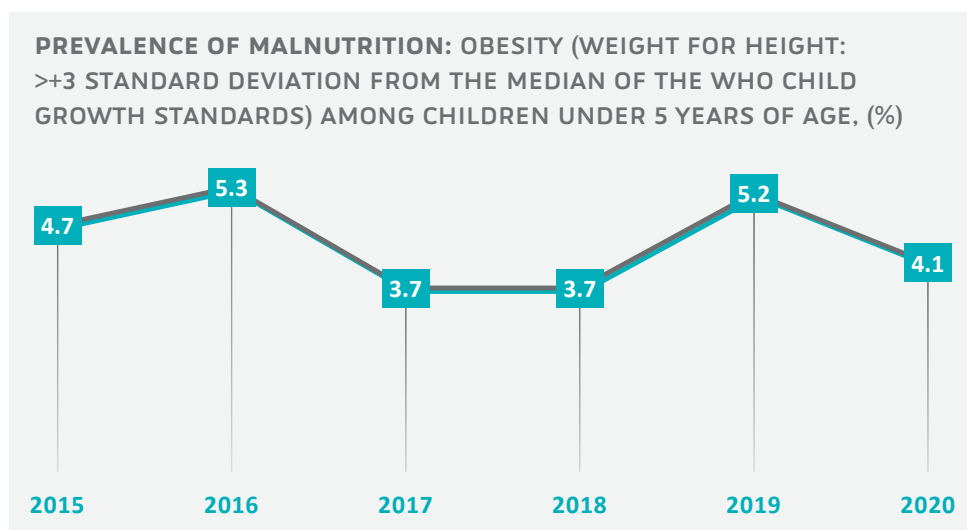


Chart 2

Source: Health indicators 2023 MOH

Suicide Rates

According to the Urban Indicators data from 2019, the average suicide rate in Riyadh was approximately 1.5 per 100,000 population. In 2022, it reached 0.5, which is one of the lowest rates globally. In comparison, the global average in 2019 stood at around 16 per 100,000, while the regional rates were approximately 4.3 - 3.87 in the same year.

Road Traffic - Safety

Riyadh has embraced private car ownership as a means of transportation to address the demand for privacy and adapt to the extreme seasonal weather conditions experienced in winter and summer. There are (98%) of the population travelling to work by their private vehicles.⁸ Following the establishment of the Interministerial Committee for Road Safety in Saudi Arabia in 2017, a notable decrease in road traffic fatalities has been observed, aligning with the target of reducing road accident-related fatalities by 50% by 2030.⁹

National efforts have played a significant role in reducing road fatalities, involving a comprehensive government approach that includes data collection and analysis, coordination among various authorities, awareness campaigns, training initiatives, the enhancement of signboards with 1300 installed nationwide, increased enforcement, and the implementation of a road safety assessment program to ensure adherence to safety standards across all roads.

The utilization of camera systems has experienced a 320% increase. Additionally, there has been an uptick in vehicle inspections, with 12.3 million trucks being inspected at weighing stations. Furthermore, three new National Centre for Security Operations (911) centers have been established.

Efforts to raise awareness about the importance of first aid have reached over 30,000 individuals. In 2022, Riyadh city recorded 5.2 fatalities per 100,000 individuals due to traffic accidents. There is a significant improvement in road safety, as the indicator in 2019 reached 15 deaths due to accidents per 100,000 individuals.

The Royal Commission for Riyadh City (RCRC) has collaborated with Riyadh Governors, local agencies, and various stakeholders' groups to launch the Riyadh Traffic Safety Strategy 2030. The aim of this strategy is to reduce fatalities by 30% by the year 2030.

(8) <https://www.kapsarc.org/file-download.php?i=166090>

(9) <https://www.who.int/news/item/20-06-2023-reducing-road-crash-deaths-in-the-kingdom-of-saudi-arabia>



Health Infrastructure

Riyadh City serves as a prominent national healthcare hub, currently boasting 45 hospitals and 136 primary health centers distributed across 207 districts. This strategic allocation of healthcare resources contributes to enhanced accessibility for residents, with a significant portion of the population having access to facilities within a 30-minute radius. Specifically, Riyadh offers a ratio of 30 beds per 10,000 inhabitants, indicating a consistent growth in healthcare capacity. As of 2022, Riyadh is home to 22 public hospitals, 7 specialized public hospitals, and 61 medical facilities, including 6 medical cities. Additionally, the private sector contributes 41 healthcare facilities to the overall healthcare landscape of Riyadh.

HEALTH FACILITIES IN RIYADH CITY

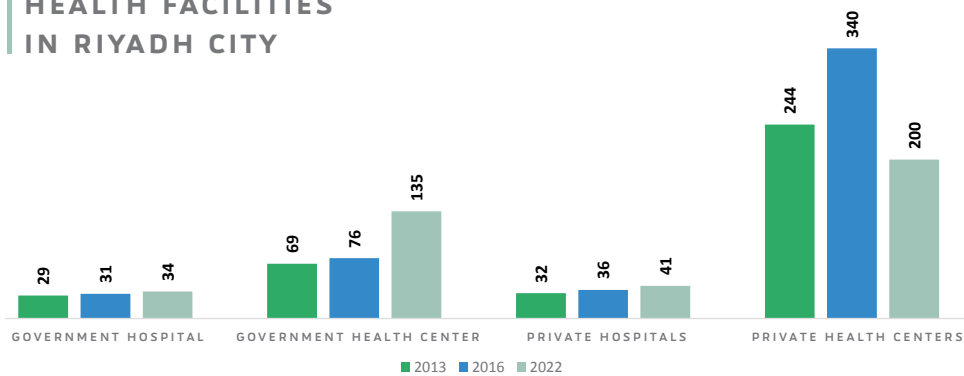


Chart 3

Health Facilities in Riyadh City (Source: MOH 2022)

HEALTH FACILITIES IN RIYADH CITY

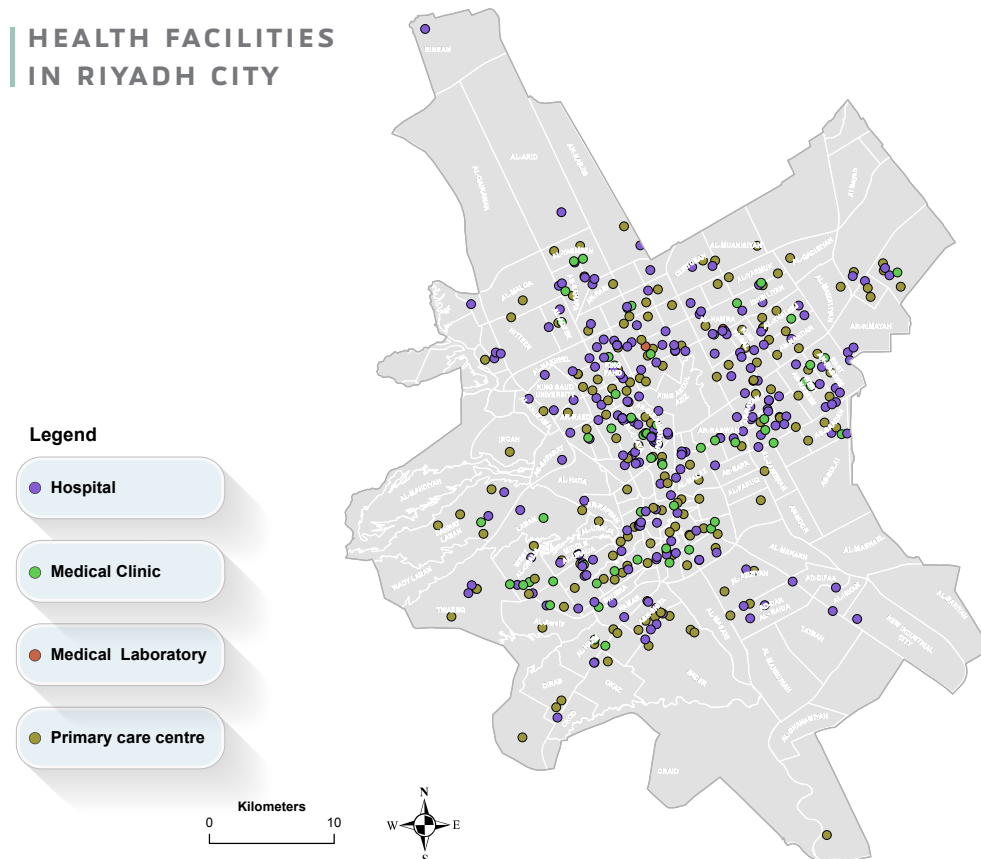


Figure 2

Source: RCRC Public Services 2022

2.1.2 Localization of SDG 03- Main Indicators¹⁰

SDG 3 Localisation Riyadh	2022		(10) RUO Indicators
Life expectancy at birth (year)	77.9	Local	
Maternal life rate Per 100,000 births	4.5	local	
Child mortality rate less than 5 years old Per 1,000 live births	6.6	local	
Newborn mortality rate Per 1,000 live births	5.2	local	
The number of deaths due to fires during a year per 100,000 Of the population	0.112676	local	
The percentage of the population with electronic health records Standardized to the total population	48%	National	
The percentage of the population covered by health insurance	100%	Local	
Suicide mortality _ The number of suicides that occurred during a year Per 100,000 of the population	0.45	local	
Number of hospital beds per 10 thousand of the population	30	local	
number of psychiatrists per 100,000 population	15	Local	
The average time taken for the arrival of the Civil Defense Accident location (min)	8-9min	Local	
Average time taken for the arrival of the Red Crescent Accident location (min)	21:32 min	Local	
Traffic Deaths per 100,000 population	5.278007	National	

Indicator/ 10,000 population	2022	
	Saudi Arabia	Riyadh
Doctors (including dentists)	40.1	44
Physician	32.7	-
Dentists	7.4	-
Pharmacists	10.6	-
Nursing (including midwives)	62.4	74
Nursing	60.9	-
Midwives	1.5	-
Allied medical categories	43	-
Primary health care centers	0.66	0.19014
Hospital beds (all sectors)	24.3	30
Hospital beds Ministry of Health	14.13199175	16
Hospital beds other government agencies	4.710767515	13.4
Private sector hospital beds	5.5	8.7
Percentage of basic immunization coverage in the last five years	97.7	97.9
Polio infection rate per 100,000 population	0	0
Measles	0.77	0.75
Injuries as a result of traffic accidents	24446	1702
Deaths as a result of traffic accidents	4555	375

2.1.3 SDG 03 related Programs in Riyadh City

Saudi Genome Program

Program based in King Abdulaziz City for Science and Technology (KACST)

A testament to the Government's attention to the nation's healthcare services, the program aims to reduce and prevent genetic diseases by implementing reliable screening and detection methods and creating the physical and legislative infrastructure for the development of personalized medicine.

Initiatives within KACST provide support for substantial medical progress aimed at detecting the genes responsible for genetic diseases in the Kingdom.

SAUDI GENOME PROGRAM INDICATORS

+100	researchers involved.
8	Saudi Research Centers working in collaboration.
134	peer-reviewed papers published in international journals.
25	gene panels developed.



الجينوم السعودي
 SAUDI GENOME



Riyadh Trauma Registry

Context ¹¹

In 2017, in recognition of the imperative to mitigate Road Traffic Fatalities and with a bold aim to achieve less than 8 fatalities by 2030, a ministerial committee established in the same year was charged with developing and executing a plan to attain this reduction objective. By the year 2020, there was a notable decrease of 48% in Road traffic fatalities. According to the World Health Organization (WHO), the creation of a national trauma

register is instrumental in reducing both mortality and morbidity rates.

These initiatives are spearheaded by the national transformation program, which encompasses 5 ministries and 3 officially registered committees. The concerted efforts carried out from 2016 to 2019 have led to a notable reduction in RTC-related fatalities by 41% thus indicating a level of achievement.

(11) Ford, Jane E., et al. "Experience gained from the implementation of the Saudi Trauma Registry (STAR)." BMC Health Services Research, vol. 20, no. 1, 6 Jan. 2020, p. NA. Gale OneFile: Health and Medicine, link. gale.com/apps/doc/A618772279/

(12) <https://www.moh.gov.sa/en/Ministry/Projects/Knowledge-Management/Documents/6.pdf>

Featured Program

Riyadh City hosts two trauma centers, namely King Saud Medical City (KSMC) overseen by the Ministry of Health (MOH), and King Abdulaziz Medical City (KAMC) managed by the National Guard. Each of these facilities boasts a capacity of over 1,000 beds, offering specialized medical services as well as opportunities for fellowship training and continuous professional development.

The trauma center at KSMC initiated a new registry in 2017 to assist the inter-ministerial committee by utilizing evidence-based reporting. Implementation strategies were devised to combine data from local and national levels for thorough reporting and to guide decision-making. Moreover, the launch of the

National Trauma Data System Data Dictionary in 2021 aims to educate pre-medical and healthcare professionals on data entry requirements, ensuring uniformity in registry forms through specified minimum data sets and established operational procedures.¹²

In pursuit of attaining Level 1 Trauma Center status, the Saudi Trauma Registry at King Saud Medical City (KSMC) in Riyadh, Kingdom of Saudi Arabia (KSA) is striving to enhance its Level 1 Trauma Centre as part of an ambitious expansion initiative aimed at actively diminishing trauma-related mortality rates.

In its efforts to become a Level 1 Trauma Center, the Saudi Trauma Registry at KSMC The King Saud Medical City (KSMC) in Riyadh, Kingdom of Saudi Arabia (KSA) is aiming to develop its Level 1 Trauma Centre in order to further contribute to the reduction of Trauma-related mortality rates through an ambitious expansion program.



مدينة الملك سعود الطبية
KING SAUD MEDICAL CITY

Riyadh Sports Boulevard

Context

As a result of the escalating prevalence of non-communicable diseases and to promote greater participation in physical activity, Vision 2030 has established several objectives aimed at fostering the adoption of an active lifestyle within the Quality-of-Life Program. Additionally, the Ministry of Sports has been established to implement a national strategy in support of these goals.

In adherence to the National Strategic Directions, RCRC has initiated the Riyadh Sports Boulevard project with the objective of enhancing access to physical fitness activities for the city's residents. In 2022, 54.8% of males engage in sports activities on a weekly basis, while 38.3% of females participate in various forms of exercise every week nationwide. The population of Riyadh is recognized for its high levels of physical activity, with 29% of Saudi Nationals and residents dedicating 150 minutes per week to exercise. Additionally, 48.2% of the country's population now partake in physical and sport-

ing activities for at least 30 minutes each week.¹³

In order to promote the embrace of a healthier and more physically active lifestyle among the growing populace of Riyadh, and in alignment with the aspirations of Riyadh 2030, the Riyadh Sports Boulevard spans a length of 135 km, connecting the city from its western region via Wadi Hanifa to its eastern area at Wadi al Sail. This strategic initiative encompasses the creation of active travel paths, micro-mobility options, and a pedestrian network that interlinks sports, cultural, and recreational amenities. Furthermore, the Boulevard will host numerous sports venues and facilities to facilitate Riyadh residents in adopting healthier lifestyles and enhancing overall well-being. The sports district will encompass 60 sports locations, including 16 football fields and 30 covered and outdoor courts dedicated to various sports disciplines.

(13) Gstat 2022

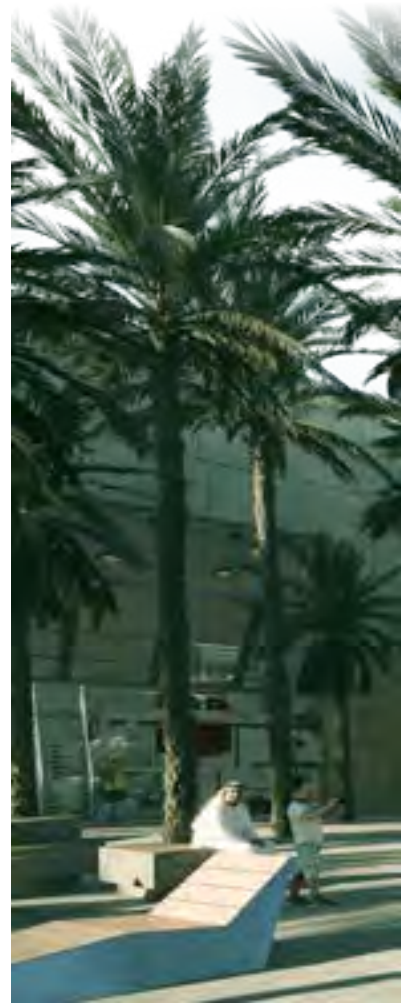
(14) <https://www.rcrc.gov.sa/en/projects/sports-boulevard-project>

Outlook ¹⁴

The commencement of phase one involved the development of 123 km of horse-riding bridleways and the establishment of two primary cycling routes (135 km and 90 km each) that cater to individuals with varying levels of riding proficiency. As the Riyadh Sports Boulevard project advances, the implementation of a monitoring framework to evaluate its health-related impact in Riyadh City would ascertain its alignment with the execution of the 2030 Sustainable Development Goals upon the completion of phase one.



المسار
الرياضي
Sports Boulevard



RIYADH

S P O R T S

INDICATORS

4,200,000

square meters of green
space areas.

120,000+

trees to be planted.

45%

increase in the per
capita share of green
space in the city.

100%

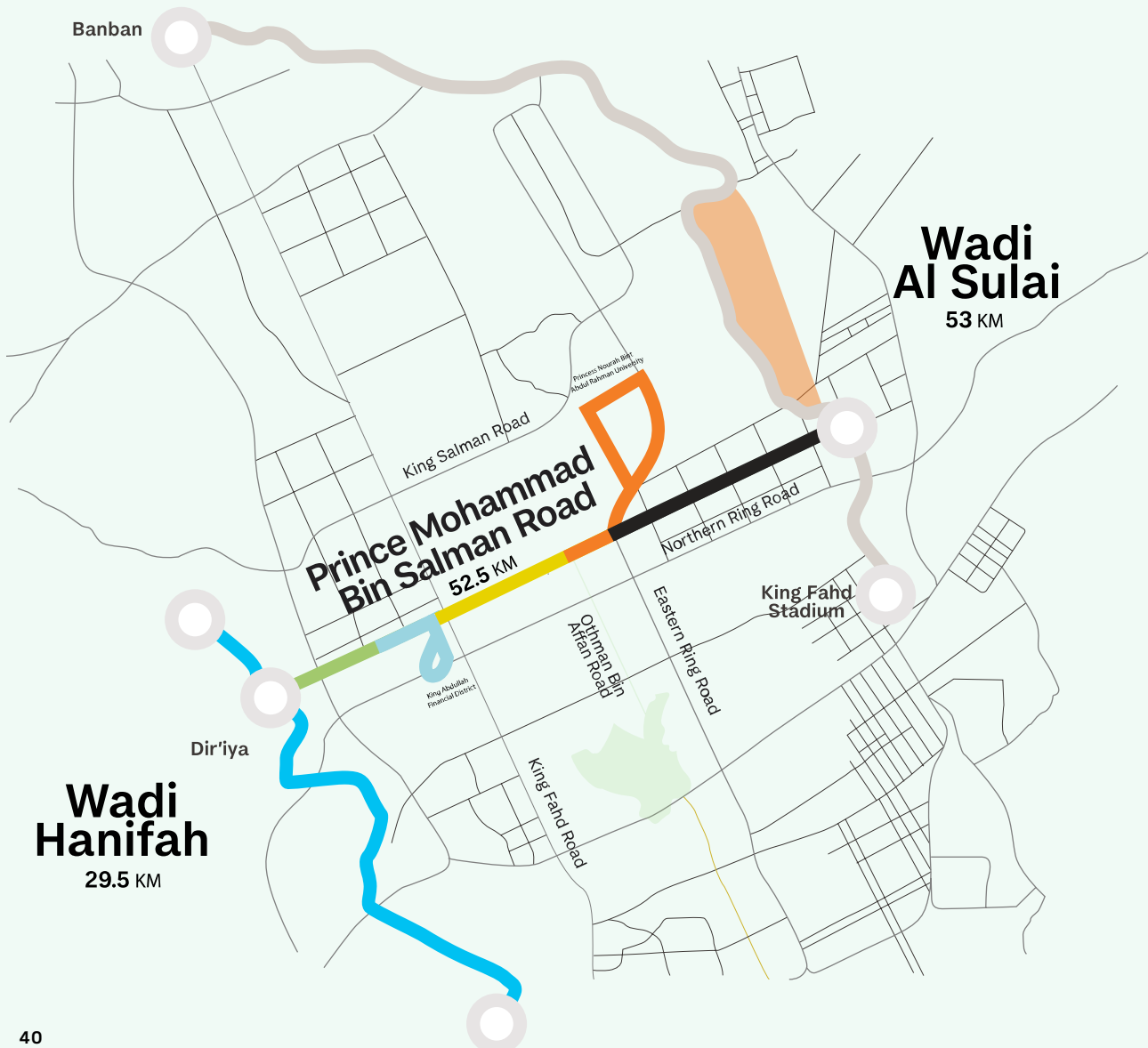
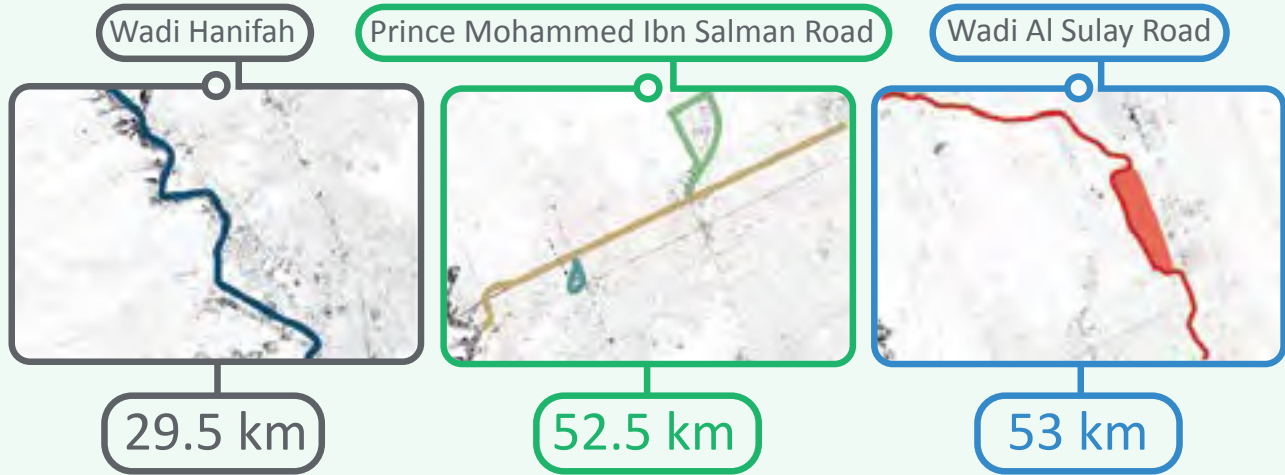
recycled water used for
the irrigation of trees
and green spaces.

35%

reduction in journey times between
neighborhoods using environmentally
friendly transportation such as cycling
and horse riding to promote a culture
of public health.



SPORTS BOULEVARD LOCATION





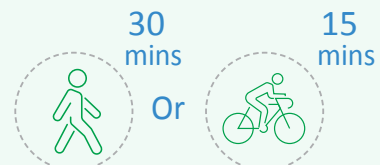
Project Length
135 km



Around

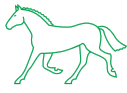
2,200,000

Of
Riyadh residents
Can reach the project by



135km - Total project length

 **220**
km
Biking
path


134 km
Horse trails

 **greenery**
and
4.2 **open**
million m² **spaces**

 **قطار الرياض**
Riyadh Metro
3 tracks & 4 stations -
connection with
Riyadh Metro

Around
2,200,000
of
Riyadh residents
that can reach the project by

20+ 
unique destinations

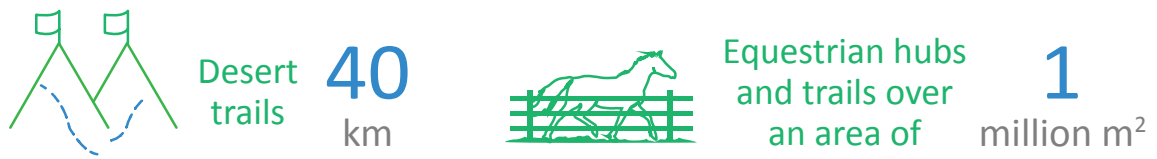
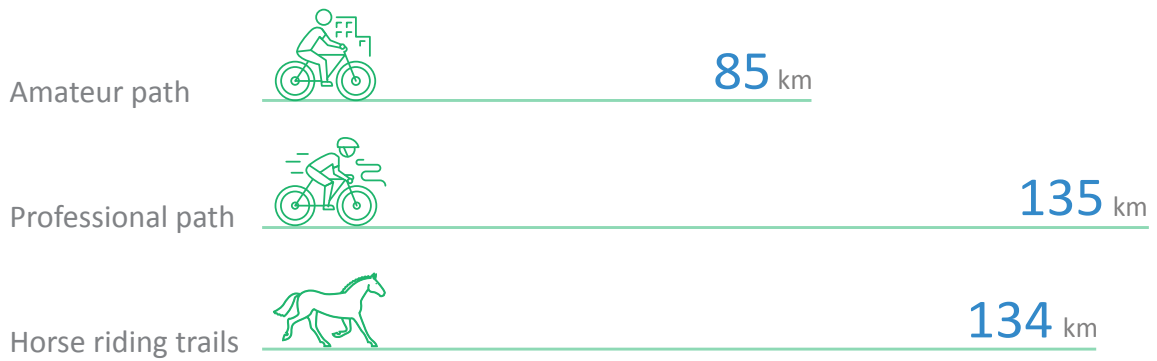
60 - multidisciplinary
sports facilities

 **The tallest sports**
tower in the world

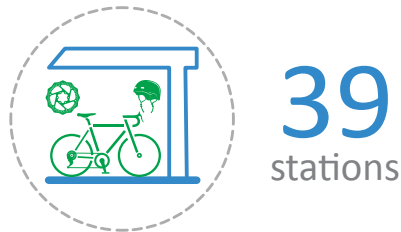

2.3+ million m²
total area for investment zones

SPORTS FACILITIES





Sports facilities on the trails

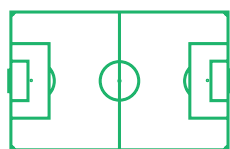


Services

- Cafes
- Bike maintenance
- Canopies
- Bicycle rental
- Meeting places
- Restrooms

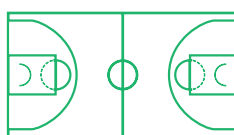
More than 60 sports facilities

Including



16

Soccer fields



18

Covered fields



12

Open fields

King Fahad Medical City (KFMC)

KFMC in Riyadh is one of Four hospitals and four medical centers collectively offer a total of 1,200 beds to accommodate 30,000 inpatients and serve 500,000 outpatients within a 500,000-square-meter area.

The Therapeutic Ultrasound Apparatus and Method is an innovative solution designed to eliminate tumors from afflicted tissues using ultrasound technology, eliminating the need for surgical intervention. This invention has been awarded patents in the United States, United Kingdom, and Europe.

The iKFMC App, boasting over 250,000 downloads and active users, provides a cutting-edge "smart outpatient visit" service leveraging Internet of Things (IoT) technology. This achievement has been recognized through an Award for e-Government Transaction and praised for its development of HIPAA-compliant software ensuring patient privacy protection.



Hospital of the Year -
Saudi Arabia award in 2023
Healthcare Asia Awards



The hands of KFMC experts in the field of rehabilitation technology crafted over 8,000 orthotic and prosthetic products in-house for the benefit of both inpatients and outpatients.

King Faisal Specialist Hospital and Research Center

A globally recognized research institution, consistently ranked among the top 100 hospitals worldwide, is esteemed as a leading medical center in the Middle East. Particularly renowned for its expertise in oncology, organ transplantation (with over 17,450 successful transplants conducted in the past 40 years), genetics, and neuroscience, the institution has also performed 424 robotic surgeries and offers 63 fellowship programs encompassing 96 sub-specialty programs.



RANKED AMONG THE
TOP **100** HOSPITALS
IN THE WORLD



2.1.4 Achievements and Improvement Areas

The health indicators of Riyadh City have shown advancement in the delivery of healthcare services and the accessibility of health facilities, aligning with the city's expansion and demographic growth. Progress has been noted in mortality rates and life expectancy. However, there is a requirement for further improvement in the areas concerning drug abuse, reproductive and sexual health, tuberculosis, HIV, and chemical toxicity. Enhanced data collection, monitoring, and reporting are needed for Riyadh City to establish a comprehensive baseline in these key health-related aspects.

01

The advanced healthcare system could experience enhanced efficiency and effectiveness through the continued digitization of health records and the increased integration of the digital health infrastructure.

02

Increase in health awareness for non-communicable diseases focusing more on prevention.

03

Implementation of an enhanced health insurance framework in collaboration with the private sector is imperative, particularly in light of Riyadh City's efforts to draw in global talent for relocation to the area.

04

Develop a monitoring tool that integrates Sustainable Development Goal 3 (SDG03) into the programs and initiatives of the health sector in Riyadh City.

05

Create a comprehensive reporting mechanism for Riyadh City that includes detailed information on Tuberculosis and HIV, as well as disaggregated data on women's access to universal family planning services and vaccinations for both children and adults.

06

Enhance reporting mechanisms on occupational safety and health to monitor private sector health indicators, with a specific focus on mental health indicators that have gained significance in the aftermath of the Covid-19 pandemic.

07

Enhance the policy framework at the municipal level to address substance abuse in all its manifestations.

08

Connect the data to the relevant policies in order to determine a standard for air quality disaggregated by neighbourhoods in forthcoming reports.

09

Implement early identification of physical and mental disabilities in early childhood to formulate preventative measures.

10

Endorse the gathering of comprehensive health data across the city for diverse demographic groups, with the aim of crafting tailored prevention approaches. For instance, monitoring mental health, substance abuse, and diabetes among youth can provide valuable insights for designing effective programs and evaluating their effectiveness on this specific age cohort.



2.2 SDG 04 – Quality Education

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

- By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes.
- By 2030, ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education.
- By 2030, ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university.
- By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship.
- By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations.
- By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
- By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.
- Build and upgrade education facilities that are child, disability, and gender sensitive and provide safe, non-violent, inclusive, and effective learning environments for all.
- By 2020, substantially expand globally the number of scholarships available to developing countries, in particular, least developed countries, small island developing States, and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
- By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

2.2.1 Assessment of Education Provision in Riyadh City¹

The Vision 2030 initiative catalyzed a sequence of educational reforms within the sector through multiple national entities, aimed at modernizing the school curriculum, upskilling educators, and promoting inclusive access to educational resources, all while aligning with human development objectives. To achieve its objectives, the education sector has adhered to international standards by allocating 8.3% of its GDP towards education, with the additional aim of enhancing university rankings, creating lifelong learning opportunities, and expanding vocational training programs.

Within Riyadh city, 27% of the population is under the age of 20, comprising 74% Saudi nationals and 25% residents. This demographic segment, along with their families, accounts for a total of

1,269,408 students who are enrolled across 4,480 educational institutions, with 50% of these institutions operating under private ownership. Notably, there is a steady increase in private school enrollment, with 31.7% of students currently attending private schools. This trend suggests that forging partnerships with private entities can effectively address future educational demands and align with the objectives of Vision 2030 for long-term financial stability.

Enrollment levels across all stages in Riyadh have reached full capacity, with 100% of children aged between 6 and 18 years. This figure represents a substantial increase from the initial enrollment rate of 20% for four-year-old children.

(1) All data, tables and Figures Sourced from Riyadh Urban Observatory 2019/2016/2013 Urban Indicators and Analysis



Significant advancements have been achieved on a nationwide scale in the area of Early Childhood Development. Enrollment rates in Kindergarten have witnessed an increase to 62% in 2023, owing to the implementation of targeted initiatives by the Ministry of Education aligned with Target 4.02 objectives. Specifically, the introduction of the Early Childhood Education program has facilitated the design of a comprehensive

framework and curriculum that aims to establish uniform standards in early childhood education, while aligning with international objectives for fostering the cognitive, academic, and social development of young children. This inclusive approach takes into account varying learning styles and individual needs to ensure a complete educational experience.²

(2) Saudi Arabia VNR 2023_ based on Education Data: UNICEF/UIS UNESCO Data Portal 2022

Status	Riyadh
Public	2218
Private	2,262
Total	4,480

Table 1
Proportion of Private and Public Sector -Educational institutions
(Source: RUO 2023)

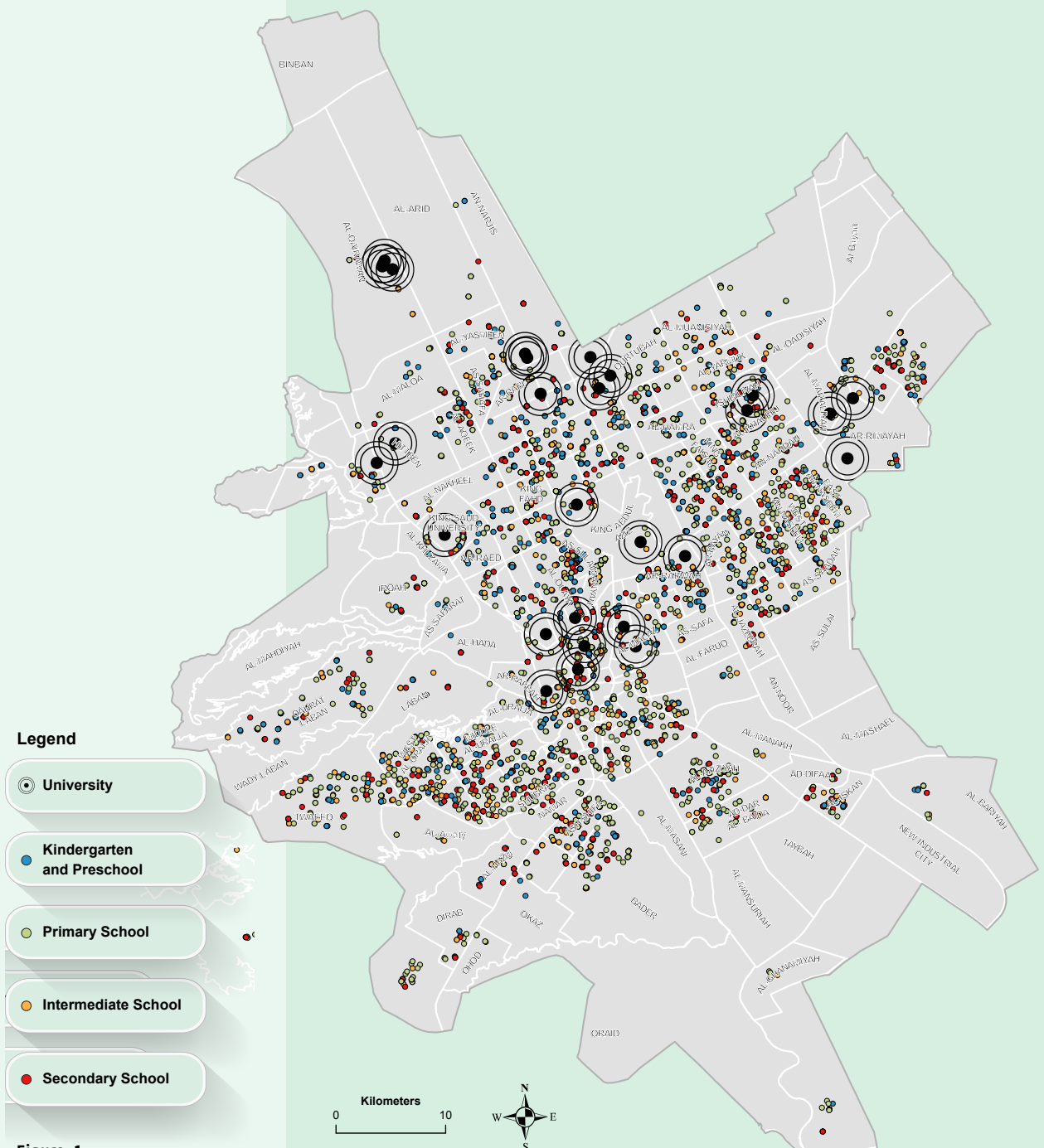
The literacy rate for Saudi among individuals aged 15 and above in Riyadh City was recorded at 96% in 2022, marking a significant increase from 92% in 2013. This trend reflects the collective efforts at both national and local levels to enhance literacy skills through targeted programs focused on reading and writing. The goal is to achieve a illiteracy rate of 1% by the year 2030.

In 2022, Updating the map of Riyadh based on the public services project conducted

by RCRC revealed that the distribution of schools aligned with the urban growth patterns of the city, demonstrating accessible and sufficient coverage. Riyadh City is home to approximately 787 nurseries, 1716 primary schools, 1151 intermediate schools, and 826 high schools. Moreover, specific educational curricula are designed for children and youth facing learning challenges, with 62 kindergartens and 25 schools dedicated to this purpose.

RIYADH CITY

RECORDED AN AVERAGE OF 25.6 STUDENTS PER CLASSROOM, WHICH SERVES AS A KEY METRIC FOR EVALUATING EDUCATION QUALITY AND THE OVERALL LEARNING EXPERIENCE. THIS AVERAGE TENDS TO RISE FROM THE PRIMARY TO THE SECONDARY LEVEL, INDICATING A GROWING NEED FOR ADDITIONAL SECONDARY SCHOOLS TO MEET THE INCREASED DEMAND.



Higher Education

In 2022, 20 % of the population of Riyadh City held a higher education degree. While this percentage aligns with established educational standards, the figure of 20,400 per 100,000 residents indicates room for improvement within the city. Discrepancies are evident when compared to other cities like London and Melbourne, where the average ranges from 32,000 to 46,000 per 100,000 residents.

A total of 12 universities are located in Riyadh city In addition to 9 educational colleges , including institutions such as King Saud University, which is one of the oldest universities in Saudi Arabia and ranks 7th in the Arab world. Additionally, Princess Nourah University holds the 8th position, while King Faisal University is ranked 15th in the Arab World. Notably, several universities in Riyadh have achieved high rankings on Sustainable Development Goal (SDG) impact metrics, positioning King Faisal University among the top 200 universities and Prince Sultan University among the top 300 globally. These universities in Riyadh cater to a significant student population ranging from 280,000 to 300,000, offering a diverse set of academic majors such as Finance, Business, Engineering, and Social Sciences. As part of Vision 2030, there is a strategic focus on enhancing the diversity of higher education programs by expanding offerings in humanities and applied sciences.

It is noteworthy that Saudi Arabia has implemented a comprehensive

scholarship program at the national level to facilitate the enrollment of Saudi graduates in highly-ranked universities abroad, supported by government sponsorship under the Saudization initiative. This program is designed to tackle unemployment among Saudi youth, align with market demands, and enhance their active engagement in the knowledge-based economy, in line with the objectives set for the year 2030. A total of 92,000 Saudi students have been awarded scholarships to pursue studies in over 80 countries, with 29,000 focusing on post-graduate degrees and 45,000 on Bachelor's degrees in Engineering, Medicine, and Business Administration, which remain the top three preferred fields among scholarship recipients. Over time, interest in disciplines such as Humanities, life sciences, social sciences, and Information technology has been gradually increasing among new graduates.

Of notable significance is the increase in female participation under the scholarship programs, reaching 35% in 2019. The primary objective of the Scholarship program is to enhance human capital development to bolster competitiveness within the job market. This program encompasses various initiatives, with one of the latest being The Custodian of the Two Holy Mosques Scholarship Program, which aims to send 70,000 students to attend the top 200 universities worldwide by 2030.³

(3) Ministry of Education
– 2019 – Scholarship
Department February
2019 Update

Territory	Riyadh	Kingdom	%
Technical Colleges	23	115	20%
Industrial Institutes	13	64	20%
International Technical Colleges	8	31	26%
Strategic Partnership Institutes	6	29	21%
Prison training institutes	5	33	15%
Private Training Institutions	333	910	37%
Total	388	1182	33%

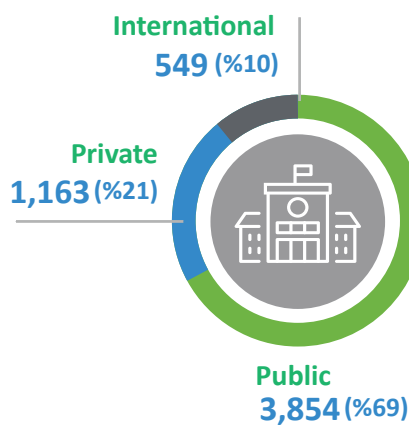
Table 2

Technical and Vocational Training - 2019 (Source GOTEVOT - General Organization for Technical Education and Vocational Training (GOTEVOT))

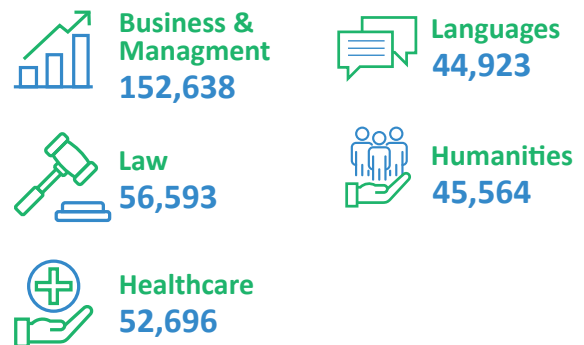
Number of technical and vocational training units:



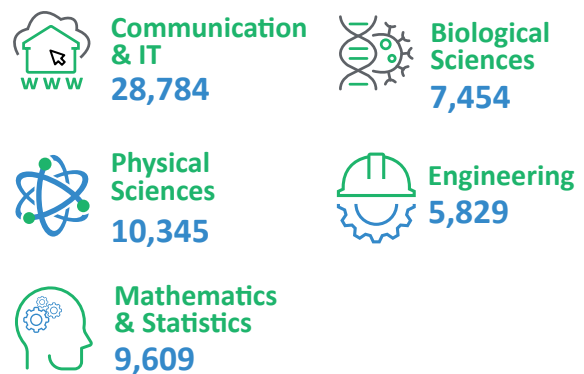
Number of schools (2022):



Number of university students by (largest programs category):



Number of university students in STEM-related programs (2019):



Riyadh City, being an economic and financial hub of Saudi Arabia, houses approximately 33% of the country's Technical and Vocational Training establishments, totaling around 388 colleges, institutes, and professional training centers. The enrollment in these technical and vocational institutes is bolstered by Vision 2030's strong emphasis on training and skills development through initiatives like the Human Capability Development Program, which is a key component of Vision 2030. This program is geared towards enhancing citizens' capabilities, equipping them for future challenges, and enabling them to effectively compete in both local and global labor markets. It includes expanding vocational training offerings to address labor market demands, ensuring alignment between educational outputs and labor market requirements, enhancing youth readiness for labor market entry, and facilitating continuous lifelong learning opportunities.

In terms of educational quality, Riyadh City has recorded a general average of 15.2 students per teacher, slightly above the global average of 13.6 students per teacher. However, this ratio varies across different educational stages. At the primary level, the ratio increases to 15.6 students per teacher, while it decreases to 14.2 students per teacher at the secondary/high school level.

Notably, there were no discernible gender-based differences in the student/teacher ratios across all educational stages. Overall, there has been an improvement in the average student-teacher ratio since 2013. It is essential to further reinforce this average to ensure that the economic development and anticipated population growth in the city are adequately addressed without compromising the quality of education.

Regarding gender equality in education, the enrollment estimates rates in 2022 indicate that 97.7% of school-aged females in Riyadh City were enrolled in school, compared to 99% of males. This demonstrates that educational access in Riyadh City is equitable across genders, fostering inclusive participation and contributing to the human development and capacity building of females pursuing higher education. It is pertinent to mention that on a national level, 51% of women attain tertiary degrees.⁴

On a separate matter, it has been noted that the average years of education for individuals aged 25 and above in Riyadh currently stands at 8 years, which is comparatively lower than cities such as London, Paris, and Singapore. This average reflects a tendency towards a reluctance to pursue advanced degrees and also serves as an indicator of the city's economic productivity. Studies have shown that each additional year of education is associated with a 10% increase in overall wages within the city.

By focusing on human development programs tailored to Riyadh City, and with the introduction of national initiatives by the Ministry of Education, it is anticipated that the need for specialized skills will rise, thereby contributing to an improvement in the average years of education for residents in Riyadh.

The COVID-19 pandemic has expedited the implementation of smart classrooms for the population of Riyadh City, as access to online teaching and learning resources has become more prevalent. Furthermore, the availability of online tools has reduced the necessity for significant investments in capital-intensive smart classroom infrastructure, as only 32% of students currently have access to such resources.

(4) OECD 2019 Saudi Arabia
Education at a glance



2.2.2 Localization of SDG 04- Main Indicators

Indicator	Year
	2022
Number of higher education degrees per 100,000 population	20400
Percentage of female school-aged population enrolled in schools	100%
Primary education students/teacher ratio	16.08
Illiteracy rate for the Saudi population (Aged of general school age 15 years and over) for the total population	4%
Average number of students per class: boys and girls (All stages)	24
Average number of students per class: boys and girls (Primary education)	24
Average number of students per class: boys and girls (Intermediate education)	27

Source: RUO Indicators



Indicator	Year
	2022
Average number of students per class: boys and girls (high school)	26
Average number of students per teacher, boys, and girls (All stages)	15
Average number of students per teacher, boys, and girls (Primary education)	16
Average number of students per teacher, boys, and girls (Intermediate education)	15
The percentage of government schools that are rented	12%
Percentage of students in private (private) schools	32%

Source: RUO Indicators



2.2.3 SDG04 related Programs in Riyadh City

International Schools Program

Context

As Riyadh City undergoes expansion and attracts skilled individuals to relocate with their families, education continues to play a crucial role in shaping their choices. In alignment with the goals outlined in Riyadh 2030, and in support of the Regional Headquarters Program aimed at drawing leading global multinational corporations to establish operations in Riyadh City, the RCRC, in collaboration with the Ministry of Investment and the Ministry of Education, has put forth proposals for educational reforms. These reforms aim to enhance educational infrastructure, facilitate private sector investment in updated curricula, establish international schools, and attract a proficient teaching staff to cater to the evolving needs of the city.

Description

Since 2021, the International Schools Attraction Program has fostered collaborations between the public and private sectors, resulting in the inception of two schools – King's College Riyadh and SEK International School Riyadh. These institutions boast well-equipped campuses and adhere to standardized curricula, with the overarching goal of enhancing the quality of education provided at the intermediate and secondary levels.

In 2022, Aldenham, a prestigious educational institution with a rich history dating back to 1597, will further enhance the diversification of the education curriculum. Additionally, Aldenham will contribute to skills development through collaborative programming with its UK campus, thereby offering long-term educational opportunities to students.

This partnership will also harness the expertise of UK alumni to enrich the learning experience.

In summary, collaborations with the private sector to enhance the educational landscape in Riyadh City play a significant role in enhancing the city's overall quality of living, fostering economic development, and promoting inclusivity by addressing the diverse educational requirements of the 80 nationalities residing in the area.



People With Disabilities in University Education

In 2008, Saudi Arabia ratified the UN Convention on the Rights of Persons with Disabilities. A key objective outlined in Vision 2030 regarding human development is to ensure that individuals with disabilities have access to education and employment opportunities that promote their independence and integration as productive members of society. Efforts will be made to provide the necessary reSources and support to facilitate their success in achieving these goals.

In 2022, Saudi Arabia recorded percentage of individuals with disabilities, with a rate of 4.2% as reported by Gstat. This figure less than the global average of approximately 8% for the country. the Ministry of Education, in collaboration with universities in Riyadh City, has developed tailored programs aimed at ensuring equitable access to education for individuals with disabilities. These programs are specifically designed to:

01

Repurposing facilities for inclusive universal design.

02

Preparatory year to advance their educational journey.

03

Formalized committees to improve curriculum and services to be inclusive of People with Disabilities.

Each university established several committees that were dedicated to reviewing and improving admission criteria and conditions for rehabilitation, as well as enhancing educational programs for individuals with disabilities. These committees also prioritized building partnerships with Community Service Organizations, non-profit associations, and professional organizations at the local, regional, and global levels to establish standards and exchange knowledge-sharing best practices.

The program involves comprehensive staff training to enhance communication skills that are sensitive to disabilities, as well as to provide teachers with the necessary training to address the unique needs of individuals with disabilities. The aim is to motivate people with disabilities to complete their higher education, encouraging them to embark on a stable and fulfilling lifelong learning journey.

The program encompasses targeted initiatives, such as a higher education program tailored for deaf and hard-of-hearing students, ensuring universal access to King Saud University and Princess Nourah University, and providing support services. In alignment with the program, King Abdulaziz University has created a specialized deanship responsible for overseeing student affairs for individuals with disabilities.⁵

(5) Saudi Arabia Inclusion for the education sector is explained in detail in this reSource on UNESCO website - <https://education-profiles.org/northern-africa-and-western-asia/saudi-arabia/~inclusion>

2.2.4 Achievements and Improvement Areas

Riyadh possesses a robust education infrastructure that facilitates the establishment of schools in accordance with the city's evolving development trends and population distribution. As the city's population becomes more skilled and specialized, it is imperative to closely monitor the quality of education in higher education, vocational training, and professional development. This necessitates the implementation of effective frameworks that align educational offerings with the requirements of the job market.

01

Utilizing a monitoring tool to assess the range of educational offerings in Riyadh, with the goal of aligning with the city's objective to enhance workforce diversity and attract skilled individuals.

02

Implement Target 4.7 in Riyadh and evaluate the effectiveness of initiatives by integrating education and sustainability strategies, particularly focusing on sustainable transportation programs. These initiatives aim to promote life skills such as independence and self-motivation, with safe cycling programs encouraging students to cycle to school and contribute to Riyadh's environmental sustainability goals.

03

Develop targeted Human Development Programs for Riyadh for 2030 that align with national policies and local objectives to promote policy alignment and consistency.

04

Establish tailored measures for early childhood education in Riyadh City that account for the various types of interventions required to address the diverse needs of the population.

05

Incorporate local indicators for Sustainable Development Goal 4 into programs within Riyadh City to effectively track, report, and assess the progress made towards the implementation of SDG 2030.

06

Create well-being strategies that inform the design and planning of both new and current educational facilities at primary, intermediate, high school, and tertiary levels. These strategies should aim to incorporate mental health objectives and promote policy alignment between the health and education sectors, with a particular focus on vulnerable social groups, children, and youth.

07

Collaborate with the nonprofit sector to implement specialized programs focused on skill development, including entrepreneurship, digital readiness, and future skills. This will foster a grassroots approach to lifelong learning.





2.3 SDG 05 - Gender Equality

Achieve gender equality and empower all women and girls

- End all forms of discrimination against all women and girls everywhere.
- Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.
- Eliminate all harmful practices, such as child, forced marriage, and female genital mutilation.
- Recognize and value unpaid care and domestic work through the provision of public services, infrastructure, and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.
- Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.
- Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.
- Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws.
- Enhance the use of enabling technology, in particular, information and communications technology, to promote the empowerment of women.
- Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.



2.3.1 Women Empowerment National and Local Overview

National Reforms Context

Saudi Arabia has implemented significant reforms under Vision 2030 aimed at empowering women and promoting gender equality in alignment with Saudi regulations and judicial decisions that reinforce women's rights. These reforms encompass various aspects such as women's empowerment in education and training, healthcare, social welfare, the National Family Safety Program, as well as the empowerment of women in legal, business, and political spheres. Vision 2030 is committed to safeguarding women's rights in key areas including healthcare, education, legal protection, employment, and ensuring access to a dignified standard of living.

IN THIS CONTEXT, A SERIES OF REFORMS WERE IMPLEMENTED IN 2016 TO FACILITATE THE REALIZATION OF THE 2030 TARGETS FOR WOMEN'S EMPOWERMENT AND GENDER EQUALITY:

- In this context, a series of reforms were implemented in 2016 to facilitate the realization of the 2030 targets for women's empowerment and gender equality.
- Laws have been enacted to allow women to travel abroad without the need for male guardian consent.
- Legislation grants women the right to register marriages, seek divorce, register a child's birth, and obtain official family documentation.
- Protective laws are in place to prevent domestic violence and harassment, and to ensure equal pay for equal work.
- The Basic Law of Governance prohibits discrimination against women and prohibits all forms of discriminatory practices.
- A national policy has been introduced to advance equal opportunities and fair treatment for women in employment and occupations within the Kingdom of Saudi Arabia.
- Additionally, Riyadh City has benefitted from national programs aligned with Vision 2030 that focus on women:
- The National Agenda for the Development of Women covers initiatives related to health, education, and employment.
- The National Family Safety Program aims to safeguard families from violence through monitoring, reporting, and awareness campaigns.
 - The National Program for the Development of Education includes a capacity-building program for female teachers across all regions of the Kingdom.
 - The Supporting Childcare for Working Women (Quran Program) offers a unified platform for childcare, providing working mothers with necessary knowledge and access to childcare facilities.
 - Kanaf serves as a financing platform to support widows and divorced women.
 - The Sakani program provides housing assistance prioritizing widows and divorced women in Saudi society.



Women and Economy

On a national level, the unemployment rate for Saudi women dropped to 15.4% in 2022 with the rate of employed women reaching 30% with the participation rate increasing to 36%. It is worth noting that the private sector is a major women employer recording a share of 41% on a national level.

Women played a major role in the financial market. In fact, nationally, the Capital market authority recorded that 1,516,999 women were investors with active trading profiles.

The domestic retail sector is the leading sector providing employment for aspiring Saudi women. At the end of 2022, there were 192,952 females employed in retail and related services accounting for 19.88% of the entire female workforce.

The retail sector has been a main contributor to the reduction in overall unemployment in the Kingdom. The diversifying Saudi economy has shown its ability to create jobs but the highest unemployment rates are predominantly found in the lesser skilled and experienced younger age categories (15-19 and 20-24). Under Vision 2030, it is a priority for public policy to stimulate employment through the Human Capability Development Program (HCDP) and promote female participation into the workforce.

The surging trend of women's economic inclusion and the expanding female workforce is in turn driving growth in consumption. Consumer spending grew by 7.46% from SAR107.1bn to SAR115.4bn to August 2023 from the same month last year. Point of Sale transactions grew a robust 10% year-on-year to SAR 54.6bn over the same period (Saudi Central Bank, SAMA).

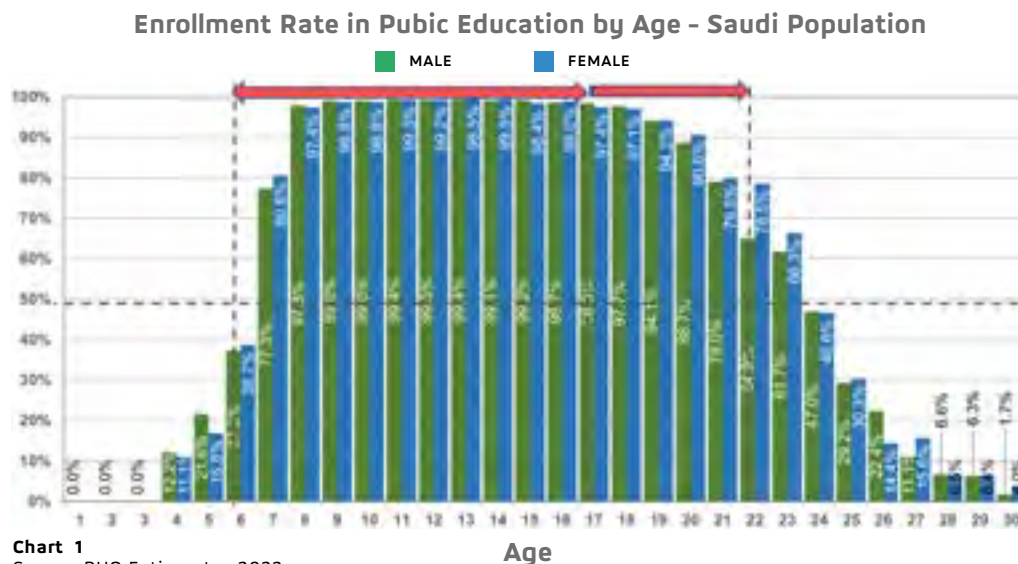
Riyadh is in an almost unique position – a job-creating, diversifying and increasingly service-oriented economy, a well-educated and rapidly expanding female labor force, a burgeoning young population where almost two-thirds of Saudis are under the age of thirty years, and strong demand-side growth of international tourist arrivals. These positive factors are being supported by a strong enabling state that seeks to support the growth of consumer spend in line with its diversification ambitions

RCRC Human Capital program is currently preparing a road map to track, report, and monitor Women's Empowerment and specifically Women's Economic Empowerment in order to develop specific indicators for Riyadh City and develop the framework for follow-up and review in line with SDG 05.

Women in Education

In Riyadh City, women have equal access to education, with a full enrollment rate of 100% up to the age of 17. Capitalizing on reforms that have expanded mobility options, young women at universities have experienced a 50% surge in enrollment. This increase can be attributed

to modifications in labor laws that have broadened their access to all economic sectors and improved their employment prospects. Particularly noteworthy is the identification of economic empowerment opportunities for women within Vision 2030-related programs.



Women in leadership positions

In Riyadh City, 10% of women hold managerial positions, reflecting a noteworthy improvement compared to the figures from 2013. Furthermore, there has been an upward trend in women's entrepreneurship, with 17.7% actively involved

in establishing or operating micro-enterprises or pursuing freelance endeavors, as indicated by data from the Global Entrepreneurship Monitor.

20% OF SHURA COUNCIL MEMBERS ARE WOMEN. WOMEN HAVE HELD POSITIONS IN THE SHURA COUNCIL SINCE 2013 AND COULD VOTE AND RUN IN MUNICIPAL ELECTIONS SINCE 2015.

Women in Information and Communications Technology

Despite the high graduation rate of Computer Science graduates, the employment levels in the sector remained low. Consequently, a program was initiated with the aim of enhancing the employability of women in the Information and Communication Technology (ICT) sector. The program focused on developing their skills and addressing the imbalance between

supply and demand. At a national level, Saudi Arabia received global recognition from the International Telecommunication Union for its program promoting women's empowerment in the Technology sector, acknowledging the significant progress made by women in the ICT field in the country.

Computer science graduates, by gender (%)

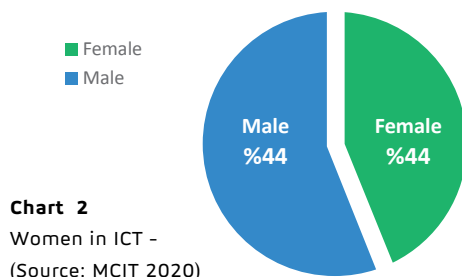


Chart 2
Women in ICT -
(Source: MCIT 2020)

- Females represent nearly half of all computer science (CS) graduates, which is a key group in ICT related studies.
- CS graduates are critical to the supply of software engineers as the courses in a CS degree are directly related to software engineering.

Female computer science graduates joining ICT industry (%)

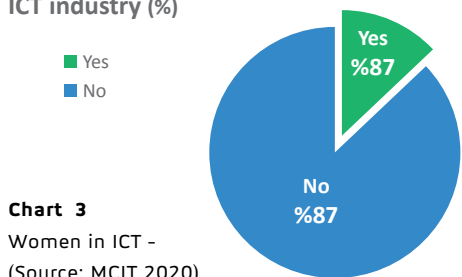


Chart 3
Women in ICT -
(Source: MCIT 2020)

- Female CS graduates are **not entering the ICT workforce, because:**
 1. Weak private sector employment
 2. Inhospitable business environment due to gender imbalance
 3. Lack of support for reproductive and family costs

2.3.2 Achievements and Improvement Areas

Riyadh City's implementation of SDG05 regarding Gender Balance and Women Empowerment has been accelerated due to the regulatory reforms in 2019 whereby laws were updated, amended, and re-written to empower women as part of the Vision 2030 societal change to transform Saudi Arabia. Despite these improvements, data regarding SDG05 for Riyadh City is scattered and fragmented. As such, consolidation of Riyadh City women empowerment and gender balance data would enable targeted programs and evidence-based policies specific to Riyadh City's needs.

01

Establish a baseline for SDG05 indicators for Riyadh City and coordinate with city local and national stakeholders' specific mechanisms for reporting and monitoring.

02

Identify women empowerment gaps in Riyadh city strategic sectors and priority economic growth initiatives and design initiatives to bridge the gap.

03

Mainstream gender indicators across programs within Riyadh City strategy 2030 and link them to localized indicators for SDG05 for Riyadh City.





2.4 SDG 06 - Clean Water and Sanitation

Guarantee the accessibility and sustainable management of water and sanitation services for all individuals.

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- By 2030, implement integrated water reSources management at all levels, including through transboundary cooperation as appropriate.
- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes.
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling, and reuse technologies.
- Support and strengthen the participation of local communities in improving water and sanitation management.



2.4.1 Water In Riyadh city – general Overview

Water Supply

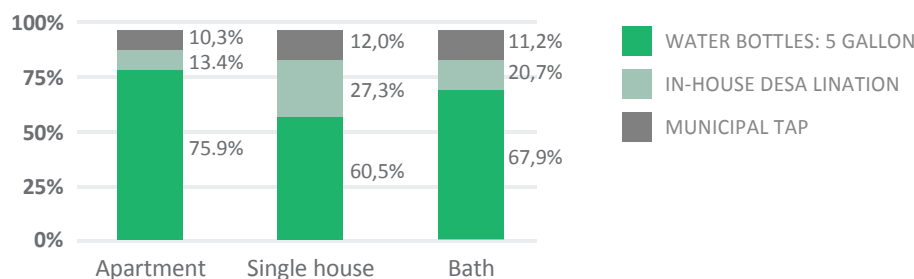
The water supply in Riyadh City is Sourced from two main avenues: desalination from a plant located approximately 470 km east of the city in Al-Jubail near Dammam, and groundwater, with a combined extraction of 362 million m3 from groundwater supplemented by 581 million m3 of desalinated water. Moreover, four strategically positioned water reservoirs, totaling 4 million m3, ensure uninterrupted supply during emergencies. The quality of Riyadh's water is rigorously monitored by the Saudi Standards, Metrology, and Quality Organization (SASO), with a

reported compliance rate of 98.1% against the 97% water quality target, involving 156,000 thorough quality assessments. The groundwater quality is overseen by the Riyadh Center for Research and Consulting (RCRC) through the utilization of 30 piezometers, in addition to samples collected at groundwater outlets as part of the Ground Water Monitoring program, which operates on a quarterly basis to ensure compliance with the standards set forth by SASO. A proactive protocol is in place to address any detected pollutants swiftly.

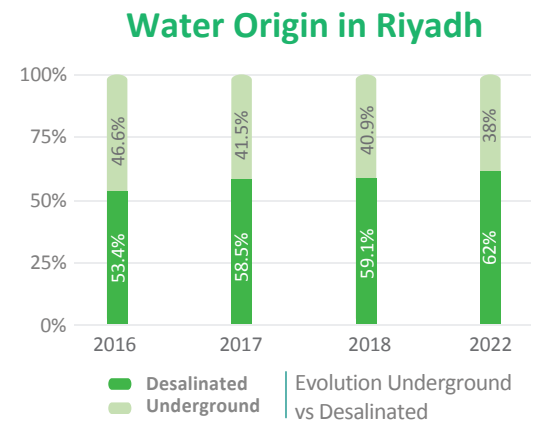
Year	Origin	Riyadh	Kingdom	Riyadh (%)
2016	Underground	481 (46.6%)	1,182 (37.8%)	40.7%
	Desalinated	551 (53.4%)	1,947 (62.2%)	28.3%
	Total	1,032	3,129	33.0%
2017	Underground	444 (41.5%)	975 (31%)	45.5%
	Desalinated	626 (58.5%)	2,175 (69%)	28.8%
	Total	1,070	3,150	34.0%
2018	Underground	438 (40.9%)	1,255 (37%)	34.9%
	Desalinated	634 (59.1%)	2,137 (63%)	29.7%
	Total	1,072	3,392	31.6%
2022	Desalinated	362 (38%)	690 (22%)	52 %
	Underground	581 (62%)	2383 (78%)	24 %
	Total	943	3,037	30,6%

Table 1
Riyadh breakdown of water Sources (Source: MEWA 2022)

A significant portion of Riyadh's population, around 98% reside in households, having direct access to potable water. The city has observed a consistent rise in water service subscriptions, primarily through municipal tap water and in-house desalination methods. However, the consumption of drinking water has experienced a slower growth rate since 2017.



The water network in Riyadh city is counting around 21.673 Km long with 718 km of new pipes. growing at 7.4% of new pipes in the kingdom. _ consisting of 16.2% of the national water network. Riyadh City's water network.



Year 2022	Riyadh	Riyadh 2017
Nb of water meters	548,650	#N/A
Length of total network (km)	21,673	18,083
Including new pipes (km)	718	206

Table 2
Water Meters in Riyadh City (Source: MEWA 2022)

Ras Al Khair Desalination Plant, the world's largest solar-powered desalination plant, will be expanded with a budget of 7.2 billion USD. It is producing 1,025 million m³ a day of drinking water at very low costs and emissions low. The Saline Water Conversion Company (SWCC) will be boosting desalination production to 7.3 million cm/d by 2020 in projects worth almost 90 billion USD. It is producing 1,025 million m³ a day of drinking water at very low costs and emissions low. It serves approximately 3.5 million people in the capital city.

Sanitation and wastewater treatment

There are 132,445 dwellings with no connection to the sewage network – around 11% of the domestic sanitation network mostly are located in sub-municipalities at the periphery of the city limits in Arka, Atika, and the North where limited densities slowed the implementation of networks. 70 private operators active in Riyadh City are serving large campuses, and urban communities in addition to commercial complexes. The National Water Company is delivering expansion to the three existing sewage water treatment plants in Riyadh City for a planned expansion from 600,000 m³ to 950,000 m³ in planned capacity for 2025.

Water Consumption

The rate of water consumption is increasing at a rate double that of population growth, yet water access remains consistently high at 98% for potable water. Overall consumption has risen by 10.4%, with residential consumption specifically increasing by 3.9%, indicating a heightened demand on water reSources from the manufacturing, services, and commercial sectors. As of 2023, the per capita water consumption rate was recorded at 365 liters, a figure notably higher than the global average.

The per capita consumption of potable water for domestic purposes is recorded at 168 liters per day, a figure that is below the global average for major cities such as Dubai (296 liters), London (164 liters), and Melbourne (133 liters). Approximately 76% of the potable water supply is allocated for domestic consumption, with industrial use accounting for just 1% and commercial activities utilizing 11% of the total water supply.

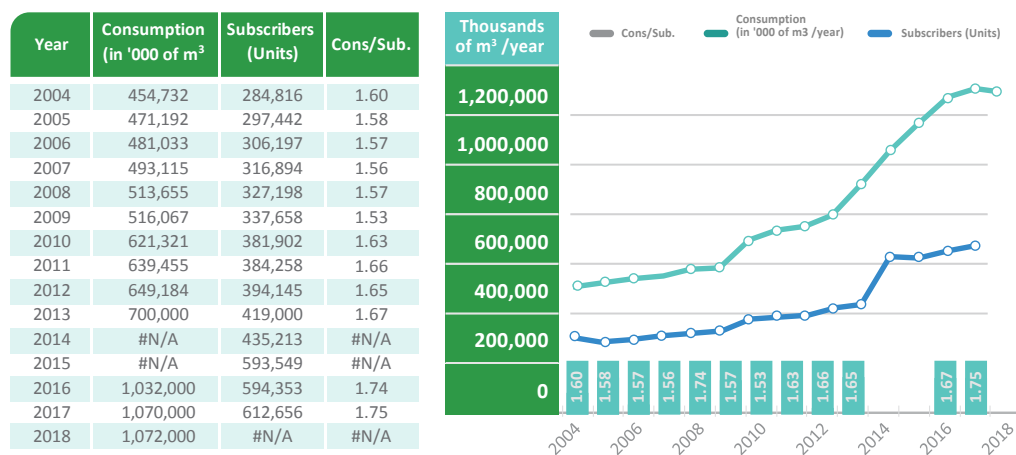


Table 3
Water Consumption and subscription trends - Analysis by RUO -2019

The Qatrah program was initiated by the National Water Company, operating under the auspices of the Ministry of Environment, Water, and Agriculture, between the 17th and 19th of March 2019. The primary objective of this program is to systematically reduce daily per capita water consumption from 263 liters in 2019 to 200 liters by 2020, and further down to 150 liters by 2030. This initiative is critical in ensuring the water security of Riyadh's population. The program's core focus is on enhancing public awareness across the public and private sectors, as well as among citizens, regarding the value of water conservation. Additionally, the program aims to reduce the cost of water supply through innovative approaches.

Furthermore, The National Water Company has collaborated with city stakeholders through the municipal services program to transition electricity meters to smart meters. As of 2019, 77.5% of water meters have been upgraded to smart meters. Additionally, NWC has implemented ICT systems to oversee the water distribution networks, although specific data on the extent of ICT coverage achieved is not currently available. The goal of expanding coverage of water networks is to reduce water loss within the network, which was measured at 22% in 2019. Given the water scarcity in Riyadh city, reducing water loss is crucial as it represents a significant financial loss due to the expenses associated with desalination for water supply. Therefore, mitigating water loss is a key component in ensuring the economic sustainability of water management in urban areas.

**PERCENTAGE OF SMART WATER METERS OUT OF TOTAL WATER
METERS INSTALLED**

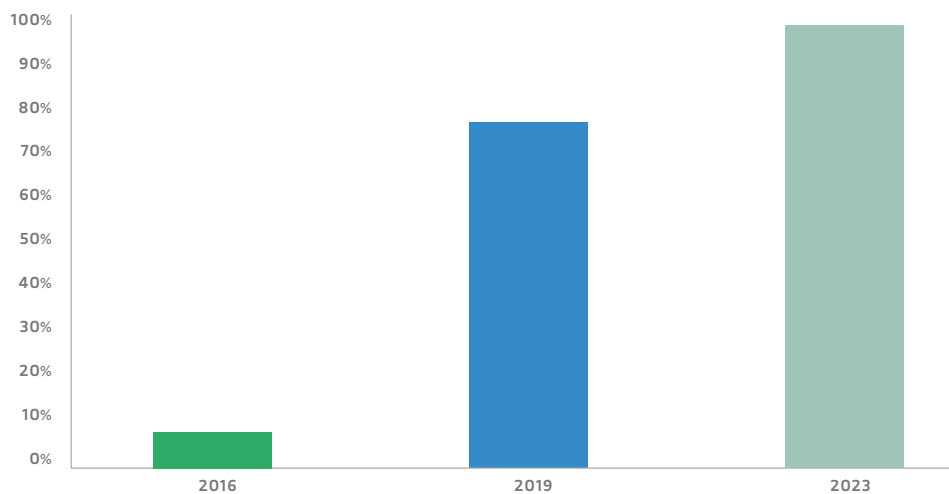


Chart 2

Source: Water Company 2023



2.4.2 Localization of SDG 06- Main Indicators

Indicator	Year
	2019
Compliance rate of wastewater treatment	100
Percentage of city population with potable water supply service	98
Percentage of city population with sustainable access to an improved water supply	100
Compliance rate of drinking water quality	100
Percentage of water loss (unaccounted for water)	22%
Average price of water used for domestic purposes per (100) cubic meters (SAR)	300
The ratio of fresh water consumption to total consumption Water	0

Indicator	2022
Percentage of city's wastewater receiving centralized treatment	91%
Total water consumption per capita (liters/day)	364
Percentage of smart water meters out of total water meters Installed	99%
Information and communication technology to the total length of the system the network local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	yes

Source: RUO Indicators

2.4.3 SDG 06 Related Programs in Riyadh City

Riyadh sustainability strategy – Treated Wastewater

Owing to the heightened need for irrigation water stemming from the initiation of several large-scale projects in Riyadh and the execution of the Riyadh Greening Program – Green Riyadh, RCRC has strategically devised a plan to provide irrigation water Sourced from treated wastewater.

In support of Integrated Water ReSource Management in Riyadh City, water-efficient irrigation techniques will be implemented city-wide, utilizing ICT-monitored Drip Irrigation systems. This initiative will be integrated into major strategic programs such as King Salman Park, Green Riyadh, and Sports Boulevard.

Currently, RCRC is in the process of formulating a comprehensive master plan for a treated wastewater network that accounts for the water requirements of various strategic urban initiatives, as well as domestic needs for private green areas, and potential opportunities for water reuse within commercial and industrial sectors. Concurrently, as part of its Green Riyadh Program, RCRC has initiated the installation of 1350 irrigation lines, equipped with ICT monitoring, to fulfill 100% of the irrigation requirements of phase one using treated wastewater.

Groundwater Rehabilitation

As a consequence of the elevation of the water table, various areas within Riyadh city are experiencing challenges such as basement flooding, structural issues with underground constructions, and degradation in the quality of the water table potentially leading to contamination. In response, RCRC has implemented a strategic groundwater drainage initiative, which has entailed the construction of over 500 km of subterranean drainage networks. Groundwater that impacts the urban regions of Riyadh is treated at the bio-remediation facility situated in Wadi Hanifah, spanning an area of 100,000 m² and featuring 140 bio-cells and an electric aeration system, deemed a sustainable solution for water management.

Expansion of Sewerage treatment plans

The majority of Riyadh City's septic tank effluents, stored sewage sludge, and wastewater undergo treatment at the Al Manhoufa plant situated to the south of Riyadh City, boasting a daily capacity of 600,000 m³. Additionally, two other wastewater treatment plants, Fleet and Hair, have been established in the southern region of Riyadh under the management of the National Water Company.

The National Water Company is undertaking a comprehensive, long-term initiative to address the increasing demands for sewerage treatment in Riyadh City. This initiative includes the following key developments:

- The capacity of the Manhoufa treatment plant was expanded by 100,000 m³ per day in 2020.
- The capacity of the Hait Plant was expanded by 50,000 m³ in 2022, with subsequent plans for a further expansion to 200,000 m³.
- Two new treatment plants are scheduled to be operational by 2025, providing an additional capacity of 600,000 m³ per day.
- The Al Dagham Facility is slated to handle solid sewage sludge disposal with a capacity of 1,100 m³ per day.

2.4.4 Improvement Areas

01

Establish an integrated water reSource management strategy aligned with the MEWS IWRM guidelines, specifically tailored for Saudi Arabia as a component of a broader, all-encompassing plan for Riyadh City.

02

Collaborate with the Qatrah program to create a tailored water conservation campaign for industrial and commercial entities within Riyadh City.

03

Establish a foundational framework for the reuse of water for domestic, industrial, and commercial purposes, as well as irrigation, to ensure the availability of comprehensive data.

04

Conduct routine monitoring of the ambient water quality in both natural and man-made water bodies within Riyadh as part of all urban development projects.

05

Promote the utilization of nature-based solutions for water bodies to implement natural filtration systems.

06

Incorporate water scarcity considerations within both climate change mitigation and adaptation frameworks, recognizing it as a significant climate risk for Riyadh City. Develop and implement impact recovery mechanisms and early warning systems to address this potential risk





2.5 SDG 07 - Affordable and Clean Energy

Facilitate universal access to cost-effective, dependable, environmentally sound, and contemporary energy Sources for everyone.

- By 2030, ensure universal access to affordable, reliable, and modern energy services.
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
- By 2030, double the global rate of improvement in energy efficiency.
- By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency, and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.
- By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all developing countries, in particular, least developed countries, small island developing States, and landlocked developing countries, in accordance with their respective programmes of support.

2.5.1 Energy and Renewable energy In Riyadh City – General Overview

Access to Energy

Riyadh adheres to the national standard in the distribution of electricity usage, with residential consumption accounting for 50% of the total demand. Notably, there was a substantial decrease in consumption from 6250 kWh/hour per capita in 2019 to 4596 kWh/hour in 2022, representing a growth of 30.7% specifically in the residential sector, followed by a 12.9% increase in overall usage, and a 26.8% increase per square meter.

In Saudi Arabia, households are charged From 0.048 USD to 0.08 USD per kilowatt-

hour for electricity, while businesses are charged between 0.058 and 0.085 USD per kilowatt-hour based on their size.

The pricing structure has undergone multiple revisions in recent years, implemented by the Saudi Electricity Regulatory Authority (SERA) since January 1, 2018.

Despite these increases, consumption levels in Riyadh continue to remain elevated, potentially influenced by the region's relatively low electricity cost ranking as the 15th most affordable worldwide in 2019.

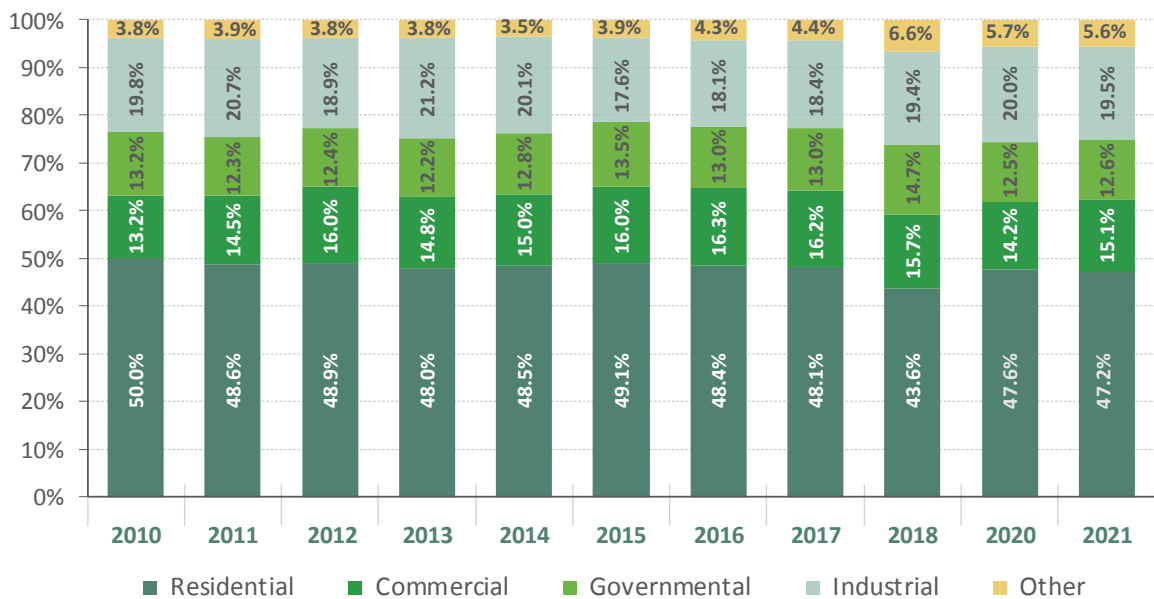


Chart 1

Energy consumption according to customer classification.

Source: electricity company

Energy Consumption and Mix

The energy mix utilized by Riyadh households and for domestic purposes included a solar panel usage rate that was twice the national average. Nonetheless, traditional Sources such as wood, and agricultural waste remained prevalent as energy Sources for heating purposes in 2018, accounting for a total biomass usage of 35%. Further investigation and scholarly inquiry are imperative to identify strategies for diminishing these figures through the implementation of low-carbon infrastructure. It is noteworthy to highlight that a significant portion of the city's population (75%) expressed openness to adopting solar power provided they are adequately informed.¹

(1) KAPSARC (2020)- Saudi Arabia Energy Report

The average energy consumption per capita in Riyadh City for residential and non-residential purposes was 10,198 kWh per year in 2019, placing it in line with GCC regional averages but exceeding those of cities such as London (1556 kWh) and Melbourne (1730 kWh). Public buildings in Riyadh recorded an annual energy consumption of 90 kWh per square meter, a figure that falls within the median range when compared to the energy consumption rates in London (172 kWh) and Boston (75 kWh).

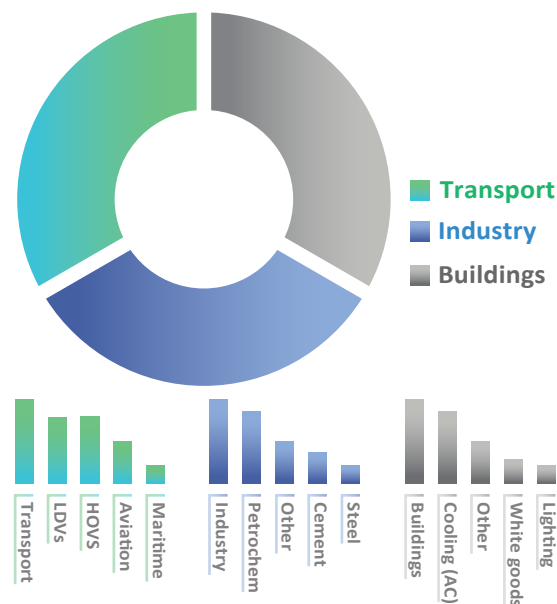


Chart 2
Saudi Arabia Energy Consumption (SEEC 2020)

Renewable Energy

The Kingdom aims to increase the share of renewable energy sources to reach 50% of the total installed capacity in the optimal energy mix for electricity generation by 2030.

Since 2022, the Kingdom has witnessed the connection of renewable energy projects with a capacity of 7.3 GW to the national electricity grid, bringing the total capacity of renewable energy Sources 52.2 GW across various stages development, which is enough to supply more than 520,000 homes with electrical energy. This achievement represents a 300% increase in total capacity, and an important step that highlights the continued progress the Kingdom is witnessing in accelerating the transformation process in the energy sector.

By the end of 2023, the production capacity of renewable energy projects under construction will reach more than 8 gigawatts. In addition, there are a number of additional projects with a capacity of approximately 13 gigawatts in various stages of development.

As part of ongoing efforts to transform the national energy mix, the Kingdom has launched a number of projects aimed at reducing dependence on liquid fuels and replacing them with gas to generate electricity. As of December 2023, 4 highly efficient gas-fired plants have been operated to generate electricity with a total capacity of approximately 5,600 megawatts.



The Ministry of Energy seeks integration and interconnection between all different energy sectors and strengthening the national and global economy as a primary driver of growth, including traditional and renewable energy, and nuclear energy for peaceful uses in the future. By adopting innovative solutions to maximize the Kingdom's economic benefit from the sector as a whole.

It includes renewable energy initiatives that integrate with hydrocarbon resources in energy production, as the Kingdom enjoys a distinct geographical and climatic location that makes benefiting from renewable energy sources economically feasible and supportive of its efforts in the field of diversifying energy sources.

The National Renewable Energy Program is a strategic initiative under the Custodian of the Two Holy Mosques Renewable Energy Initiative and the Kingdom's Vision 2030, as it aims to increase the Kingdom of Saudi Arabia's share in renewable energy production to the optimum level. It is also designed to achieve balance in the mix of local energy sources and fulfill the Kingdom's commitments towards avoiding emissions.

Through the program, the Ministry of Energy is working to diversify the national energy mix used in electricity production, by increasing the share of gas and renewable energy sources in it, as the Kingdom aims to achieve the optimal, most efficient and least expensive energy mix in electricity production, by replacing liquid fuels that are consumed as fuel in electricity production. And to compensate for it with gas and renewable energy sources, which will each constitute approximately 50% of the energy mix for electricity production by 2030.

The Ministry is working to develop the renewable energy sector by creating a local competitive market that contributes to increasing private sector investments and encourages partnerships between the public and private sectors. What confirms the success of what the Ministry has done in this aspect so far is that it has achieved for the Kingdom the most competitive price in the world for electricity generation projects from wind and solar energy.

The most notable achievements in the sector:

01

Launching the first phase of the National Renewable Energy Program, which includes the Sakaka solar photovoltaic power plant project and the Dumat Al-Jandal wind power plant project with a total capacity of (700) megawatts

02

Launching the second phase of the National Renewable Energy Program, which consists of seven solar photovoltaic projects with a total capacity of (2,970) megawatts.

03

The Dumat al-Jandal wind power station project achieved a world record as the lowest cost of purchasing electricity produced from wind energy in the world.

04

Launching the third phase of the National Renewable Energy Program, which consists of four solar photovoltaic projects with a total capacity of (1,200) megawatts.

05

The Shuaiba solar photovoltaic power station project achieved a world record as the lowest cost of purchasing electricity produced from solar energy in the world.

Program for the localization of renewable energy technologies, focusing on solar systems, hybrid diesel generators, and testing electricity generation in low temperatures. Commence planned projects in alignment with the program objectives.

Furthermore, the Electricity and Cogeneration Regulatory Authority (ECRA) has implemented regulations for Small Scale Solar Photovoltaic Systems. In July 2018, ECRA introduced a set of guidelines aimed at standardizing the installation of small-scale solar photovoltaic systems. This framework outlines the terms, conditions, requirements, procedures, and fees associated with the distribution system.

The Net Metering protocols govern the export of excess energy to the distribution system. The guidelines outline the requirements for the safe and efficient construction, installation, maintenance, and operation of small-scale PV systems in all types of premises. These guidelines extend to any residential or commercial entity looking to generate energy for internal use on their premises. The capacity of such systems must range from 1 kWh to 1 MW, with a cumulative limit not exceeding 5 MW. These regulations also include financial incentives designed to encourage and stimulate private sector investments in small-scale renewable energy applications.

Energy Efficiency

The city of Riyadh is currently participating in the National Energy Efficiency Program, initiated by the Saudi Energy Efficiency Center (SEEC), with the primary objective of optimizing energy production and consumption processes. As part of this initiative, energy efficiency labels have been developed for certain energy systems in order to support the city's energy conservation objectives.

The construction, transportation, and industry sectors consume 90% of Saudi Arabia's domestic energy, according to SEEC. In Saudi Arabia, the industry sector consumes 47% of primary energy, and 70% of that energy is used in the petrochemical, iron, and cement industries. Around 75% of Saudi Arabia's electricity is produced by the Construction sector, which consumes 29% of Saudi Arabia's primary energy. In 2017, the transportation sector consumed 21% more electricity.

Tarshid – the National Energy Services Company – currently owned by PIF, is a major energy efficiency contributor with a national retrofit program for government facilities and buildings. By 2030, Tarshid is expected to improve street lighting, government buildings (110,000 buildings), public schools (35k schools), mosques (100k mosques), and health facilities (2,500 facilities).

In a super-ESCO model, the public sector provides financing, regulatory and institutional support, while the private sector provides project management, technical support, operation, and maintenance under a public-private partnership model. There is no data available about the program's impact on Riyadh City. Retrofitting buildings reduces energy consumption by optimizing air conditioning, ventilation, and other mechanical and electrical systems.

Heat, Ventilation, and air conditioning (HVAC) systems, in particular, can contribute significantly to energy savings; heating and cooling account for 40 to 60% of a building's overall energy use.

	Yes	No	Not sure
Riyadh	24.6%	52.6%	22.8%
Kingdom	22.7%	57.1%	20.3%

Table 1
 Thermal Insulation in Riyadh City for households (Household Energy Survey -2019-Gstat)

Retrofits are not only associated with buildings but can also be aligned with citywide initiatives; street lighting can represent up to 40 percent of the electricity bills at the municipal level and accounts for 15 percent of global power consumption and 5 percent of greenhouse emissions. Replacing traditional street lights with smart LED energy-efficient luminaires delivers electricity savings of up to 80 percent.

Energy and Technology

Riyadh's energy sector is going through digital transformation. Although only 5.52% of electric meters in 2019 were smart, 100% of electricity networks are monitored using ICT technology. Compared to London (0.19) and Amsterdam (0.26), only 0.11 outages per subscriber were recorded with a duration of 0.18 hours.



2.5.2 Localization of SDG 07- Main Indicators

Year	
Indicator	2019
The percentage of roads and streets that are monitored Using information and communication technology to a total Along the streets	63.64%
Indicator	2022
Total end-use energy consumption per capita (kw/year/capita) - Residential	4596
Percentage of city population with authorized electrical service (residential)	100%
Average Duration of Outages	60 minutes
Percentage of the electricity supply system to be completed Monitored by information and communication technology to The total length of the supply network	100%
The percentage of roads and streets that are monitored Using information and communication technology to a total Along the streets	100%

Source: RUO Indicators



2.5.3 King Abdullah City for Atomic and Renewable Energy

With an independent corporate identity, King Abdullah City for Atomic and Renewable Energy is a scientific, research, and government organization. Under the chairmanship of the Ministry of Energy, Industry, and Mineral Resources, it handles the nation's nuclear and renewable energy affairs. As a result, it contributes to the country's sustainable energy development. In 2010, King Abdullah City for Atomic and Renewable Energy (K.A. CARE) was established in Riyadh City. It is in charge of the sustainable development of the energy sector, which includes:

- Sector Policies
- Developing technologies in the field based on data about renewable energies
- Joint research programs between kingdom-based and foreign laboratories
- Developing feasibility studies for nuclear reactors and other uses of nuclear power for peaceful purposes
- Analyzing the economic impact of energy resources within its scope
- Partnerships with international suppliers for the production of electricity and desalinated water from renewable and nuclear energy sources.



Additionally, it contributes to renewable energy projects by building capabilities in the renewable energy field, as well as by contributing to value chains and localizing renewable energy content as well as standard specifications on renewable energy technologies.



Solar PV Cell Project

KING ABDULAZIZ CITY FOR SCIENCE AND TECHNOLOGY (KACST) has spearheaded efforts to tailor photovoltaic (PV) technology to the arid conditions of Saudi Arabia, aiming to mitigate the risks associated with large-scale solar deployments. A specialized facility in Riyadh region called the PV reliability lab, the internationally accredited Laboratory examines the efficiency and reliability of solar panels, ensuring that the technology being used meets high standards, and beyond, specially within the unique arid conditions of Saudi Arabia. The ISO 17025 lab have provided testing service to PVs manufacturers from more different countries.

also advancing beyond traditional silicon with cost-effective, environmentally friendly solar technologies like organic and perovskite solar cells. (KACST) is intensifying its collaborations with national and international industry leaders to advance critical research and development in A significant breakthrough from these initiatives is the development of an anti-soiling coating for solar panels.

60,000 cubic
meters of clean water
are produced daily
by Al Khafji's solar-
powered desalination
plant.

35,000 solar
panels are being
produced locally in
Saudi Arabia.

**TO DATE, THIS
IS THE LARGEST
FACILITY TO
BE POWERED
BY LOCALLY
MANUFACTURED
SOLAR PANELS.**

Sub-projects include:

- Manufacturing plant for solar PV modules with 100 MW of an annual production capacity
- Solar PV cell manufacturing plant with 100 MW of an annual production capacity
- IEC-certified international laboratory for solar panel reliability testing.
- Water pumping powered by solar energy
- School powering with solar energy



Sudair Solar Power Plant

As part of the Sudair solar power project, 1.5 GW of photovoltaic (PV) solar panels will be installed in the Riyadh Region. This plant will become the largest solar power plant in Saudi Arabia upon completion. It has been announced in April 2021, and it will begin generating electricity by 2022, powering 185 thousand homes and reducing 2.9 million tons of greenhouse gas emissions.

2.5.4 Improvement Areas

01

Analyzing the supply and demand of energy in Riyadh City that could be supplied by renewable energy Sources, such as solar and wind power.

02

Developing a regional sustainable energy plan for the Riyadh Region that addresses the linkages between supply and demand for a mix of energies, as well as digital transformation of the energy sector.

03

Ensure Riyadh City's energy security is an integral part of its climate change plans.

04

Incorporate Riyadh city's specific SDG07 database to collect, monitor, and report on data and to inform Riyadh's local stakeholders about evidence-based policies.

05

Assess Riyadh City's contribution to Saudi Arabia's Renewable Energy Targets and Net Zero.

06

Implement a building retrofitting initiative specific to Riyadh City under the National Building Retrofitting Plan.

07

Develop a green buildings database for Riyadh City to monitor its 2030 Energy Efficiency targets.

08

Monitoring and reporting on Riyadh's district cooling, distributed solar energy production, and storage.

09

Incorporate Riyadh City specific retrofitting initiatives into the National Building Retrofitting Plan.





2.6 SDG 09 - Industry, Innovation and Infrastructure

Encompass the development of robust infrastructure systems that can withstand various challenges, by promoting industrial practices that prioritize inclusivity and sustainability, and cultivating a culture of innovation.

- Develop quality, reliable, sustainable, and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.
- Promote inclusive and sustainable industrialization and, by 2030, significantly raise the industry's share of employment and gross domestic product, in line with national circumstances, and double its share in the least developed countries.
- Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.
- By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased reSource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
- Enhance scientific research, and upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
- Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological, and technical support to African countries, least developed countries, landlocked developing countries, and small island developing States.
- Support domestic technology development, research, and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.
- Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in the least developed countries by 2020.

2.6.1 Infrastructure in Riyadh City - general overview

Infrastructure development

Located at the center of Saudi Arabia, Riyadh City is an infrastructure and logistic hub for the country and is well connected to the surrounding regions by highways, rails, and airways.

The North railway project is the world's longest railway network, using the European Traffic Management System (ETCS-L2), connecting Riyadh city and Al-Jouf region through Al Majmah, Qassim, and Hail. A total of 2,750 kilometers of track are involved in this project. Starting in Riyadh and running northwest near the Jordanian border to Al Haditha, the North Train Passenger Line spans a length of 1,250 kilometers. Through Al Majmah, Qassim, and Hail, covering more than 2,750 kilometers. On the other hand Riyadh City is connected to the Eastern Region via a 556-kilometer cargo line. A passenger line links Riyadh to Dharan, Baqiq, Al Hofuf, and Dammam. It connects King Abdul Aziz Port with Riyadh through Al-Ahsa, Abqaiq, Al-Kharj, Haradh, and Al-Tawdhihiyah. The Riyadh-Dammam railway transports almost 350,000 twenty-foot equivalent containers (TEU).

In order to enhance connectivity between regions through various initiatives – increasing the capacity of the current freight network and implementing safety measures – Saudi Arabia has implemented the National Transport strategy. Among its major projects is the Saudi Land Bridge Project, which will further cement Riyadh Logistics's network. By implementing this project, the Red Sea coast seaports and Arabian Gulf seaports will be better connected. Since Riyadh is midway between the two coasts, the project will bolster Riyadh's position as a logistics hub for Saudi Arabia. It is anticipated that the land bridge will be completed in 2028.

Among other infrastructure development programs in Riyadh, the General Authority for Civil Aviation announced in 2018 the development of a Special Integrated Logistics Zone that will offer its services over a 3 million square meter area. Over 650 million Asian, European, and Afri-

can customers will be served by the zone, which offers financial and economic incentives such as a 50-year VAT suspension, zero-rated corporate, income, and withholding taxes on certain payments, and a suspension of customs and import restrictions. A variety of facilities and services will be available in the zone, including aircraft facilities, government-sponsored training programs, cargo handling services, and innovative cargo-tracking technologies.

Riyadh Dry Port, which is connected to Dammam's Sea Port by Private Public Partnerships, measures 918,639 square meters and is the only logistics hub in the Kingdom that has an average annual growth rate of 9.75% in terms of imports. By 2030, the company plans to handle 1.5 million containers annually and develop multimodal and cargo solutions in partnership with Saudi Railway Company, RCRC, Riyadh Region Municipality, and key stakeholders.

SAUDI ARABIA IS HOME TO ONE OF THE WORLD'S FASTEST-GROWING AVIATION INDUSTRIES

01

The Kingdom's aviation industry is worth 34 billion USD, and 99 million passengers pass through its airports every year.

02

The nearest airport is within two hours' drive of 90% of the Saudi population.

03

The airline has connections to 81 airports in 45 countries, with plans to increase to 250 in the near future.

04

More than half of the world's population is just five hours' flight away.

مطار الملك خالد الدولي
king khalid int'l airport

King Khaled Airport

has non-stop flights to 82 international destinations and 25 domestic local destinations, including Jeddah, Dammam, Jazan, and Al Madinah, the country's largest airport by number of flights and passengers.

Total Flights

241,515

International flights

113,970

Passengers

31,97 Million

Cargo

447,524 Tons

Source: Riyadh Airports 2023





King Khalid Airport is currently undergoing an expansion, including the construction of Terminal 6, which is expected to accommodate 35 million passengers. This project involves a total investment of 16 billion USD and includes the development of a new hall. Located 35 km north of Riyadh, King Khalid International Airport (KKIA) began an expansion of Terminals 3 and 4 in January 2013 to increase its capacity to handle between 20 and 25 million passengers per year. Further expansion plans aim to boost the airport's capacity to 120 million passengers by 2030. Terminal 5, which was

inaugurated in 2016, now serves all domestic flights, offering comprehensive services for travelers visiting the potential Expo 2030 site and other tourism destinations in the Kingdom. This expansion is part of Saudi Arabia's broader goal to become a major aviation gateway for both domestic and international traffic. Additionally, Riyadh launched its own airline, Riyadh Air, to support the city's ambitions for 2030, with plans to transport 100 million passengers to 100 destinations by that year.

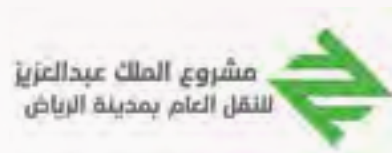
TRANSPORT AND LOGISTICS

Riyadh City, as part of the Riyadh Region, is a central hub within the transport and logistics network, encompassing air, rail, and a dry port, thus facilitating the movement of goods both nationally and internationally. Notably, 55% of the nation's air cargo is routed through Riyadh. The city's strong connectivity to other cities in the Eastern Region, Qassim, and the Northern Borders enhances its competitiveness as a logistics hub.

The National Transport and Logistics Strategy aims to position the country as one of the largest logistics hubs in the region.

Central to this vision is the role of Riyadh Dry Port (RDP) in the transportation of goods to and from the Expo. Owned by the Saudi Railways Company, the Dry Port is connected by rail to the Sea Port of Dammam in the Eastern Province, ensuring seamless and efficient freight operations between Riyadh and the Gulf. Currently undergoing expansion, the RDP's capacity is expected to reach 1.5 million containers by 2030.

Saudi Arabia ranked sixth overall on the 2021 Agility Emerging Markets Logistics Index and third on the index for Business Fundamentals. These achievements were driven by the deliberate development of comprehensive regulatory oversight and effective economic management.



As part of national efforts, Riyadh City is implementing various measures to upgrade existing infrastructure and ensure its resilience by 2030. These measures include the Saudi Green Initiative, the Riyadh Sustainability Strategy, the Riyadh Solid Waste Management plan, and the Riyadh Wastewater Strategy. Additionally, the King Abdul Aziz Public Transport Program and the National Renewable Energy Program are being developed. The city is also undergoing a digital transformation of its roads and traffic operations, utilizing ICT to effectively monitor and manage infrastructure.



Industrial sector

Riyadh City is home to one-third of the country's factories, which produce machinery, equipment, metallurgical goods, chemicals, construction materials, food, textiles, furniture, and publications. The Riyadh manufacturing sector comprises 3,587 factories.

To accelerate private sector participation in industrial development and encourage innovation, 290 incentive programs have been launched nationally. These include employment support for Saudi employees provided by the Human ReSources Development Fund (HRDF), working capital financing by the Saudi Industrial Development Fund (SIDF), tax exemptions on export earnings by the Zakat, Tax and Customs Authority (ZATCA), tax credits on R&D investments by ZATCA, and customs exemptions on raw materials, machinery, equipment, and spare parts by the Ministry of Industry and Mineral ReSources.¹

Manufacturing currently accounts for 8% of employment in 2022.

In Riyadh, 40 factories contribute to a large pharmaceutical cluster, while 188 factories form a significant machinery cluster.

Factory facilities could be located in one of Riyadh's Industrial Cities, which offer

discounted annual rent rates for industrial land as well as leasing prices for ready-built factories with electricity, water, and broadband connections:

In the first industrial city, formed metal products are manufactured except for machinery and equipment, rubber and plastic products, other non-metallic mineral products, and electrical equipment.

The second industrial city includes service contracts, rubber, plastic, and fabricated metal products (except machinery and equipment), food products, chemicals, and other non-metallic mineral products, as well as electrical equipment among other industries

The 3rd Industrial City, food products, other manufacturing industries, chemicals, chemical production, rubber and plastic products, and services contracts are being manufactured.

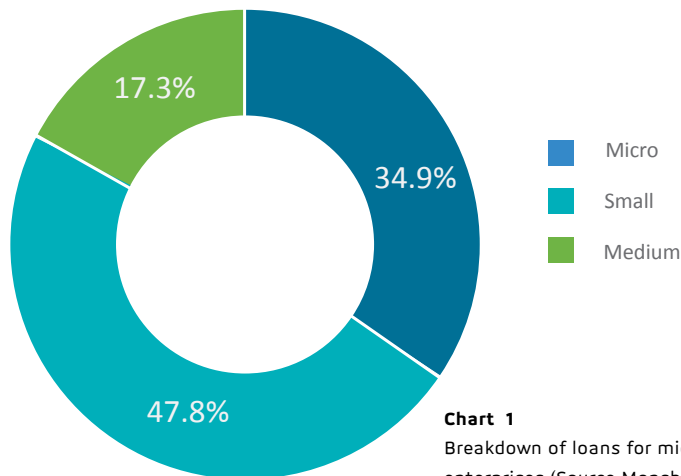
The Saudi Industrial Development Fund (SIDF) disbursed 256 million USD in 2020 through 70 loans to finance industrial developments in Riyadh - double the amount disbursed in 2019 which was 177 million USD.

(1) MISA 2021

Small and Medium Enterprises

As of 2019, there were 27,57 business licenses issued per 100,000 population in Saudi Arabia, an increase of approximately 100 billion Saudi Riyals since 2013. On a national scale, the Monshaat service has enabled SMEs in Saudi Arabia to obtain about 100.2 billion Saudi Riyals:

- There are 23.2 billion SAR in loans enabled through the Tamweel platform (Funding Gate) - an online one-stop shop that aggregates lenders for the financing of Small and Medium Enterprises (SMEs).
- The Saudi Venture Capital Company (SVC) invested 2.7 billion SAR to stimulate the private investment ecosystem.
- A total of 5 billion SAR will be lent through the indirect lending initiative, which permits finance companies to provide low-cost loans.
- KAFALAH's loan guarantee service has insured 64.6 billion SAR, reducing risk and increasing lender appetite.

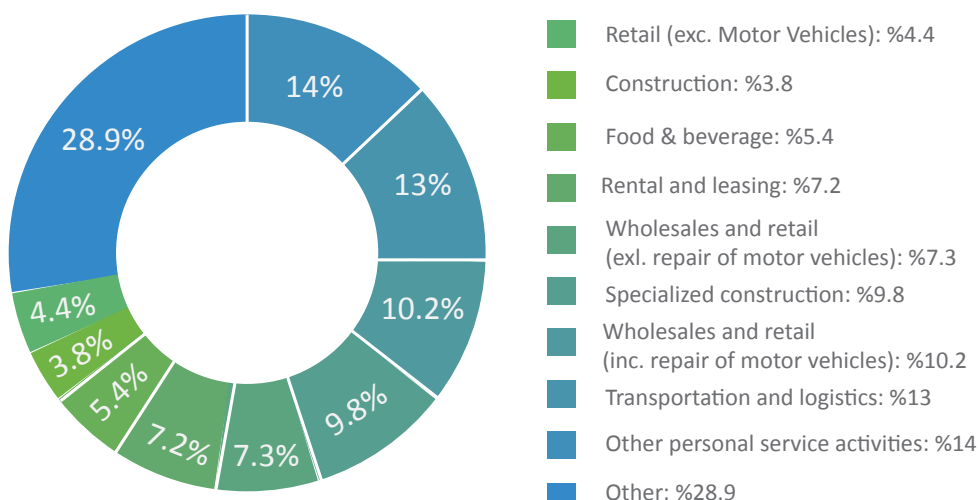
**Chart 1**

Breakdown of loans for micro, small, and medium enterprises (Source Monshaat 2022)

Because SMEs in Saudi Arabia are governed at the national level- the SME sector grew by 5% in 2022 – a strong recovery from the pandemic – reaching- Riyadh accounted for 31.8% of the Medium Kingdom SMEs amounting to 238,500 with a similar proportion of employment, i.e. 1,829,000 in Riyadh out of 4,924,239 total. 42.3% of all private sector employment is accounted for in Riyadh.

RIYADH CITY HAS 238,500 SMEs OUT OF WHICH

- There are 210,179 companies in the micro-size category with fewer than five employees and revenues of less than three million SAR - 96.3% of all companies.
- There are 6,492 small businesses with 6 to 49 employees and revenues of less than 40 million SAR. This represents 3% of the total.
- A total of 1,565 are medium-sized companies, with between 50 and 200 employees and revenues between 40 and 200 million - 0.7% of the total.

**Chart 2**

SME Breakdown by Sector - Saudi Arabia (Source: Monshaat 2022)

Digital infrastructure

Riyadh ranked 30th on the smart city index in 2021 and 3rd among Arab cities, an increase of 23 positions in comparison with 2020,



according to the International Institute for Management and Development (IMD) Smart City Observatory. According to the World Bank's 2020 report, the Kingdom also ranked first in the ease of doing business ranking and climbed 16 places on the World Economic Forum's Global Competitive Index 2019. In 2019, Saudi Arabia had a value of \$28.7 billion, ranking 13th internationally, with rapid growth in both the consumer and enterprise markets. Saudi Arabia has one of the highest social media penetration rates in the world.

According to the latest figures, there were 43.8 million mobile subscribers in 2019, representing 129% penetration of the total population. It is the first country in the Middle East and North Africa to adopt commercial 5G technology, and third worldwide - an achievement expected to accelerate other digitalization trends associated with the Fourth Industrial Revolution. Saudi Arabia is ranked 5th among G20 countries in terms of internet speed, jumping eight places from 105 to 25 with average internet speed of 51.8 Mbps. The ICT sector contributed 4% to the national GDP in 2020.

Riyadh has been named the Arab world's first digital capital for 2020 at the 23rd meeting of the Council of Arab Ministers of Communications and Information Technology (ICT). As a result of the supportive ecosystem for ICT investment in the Arab region, active initiatives that develop knowledge within the sector, and the adoption of new initiatives that facilitate and enhance technology entrepreneurship.

In 2030, Riyadh City will be transformed into a Smart City with a highly developed ICT infrastructure and an ambitious Smart City program. As of 2019, 90% of the population was connected to the Internet, and 99% were connected through a mobile phone. As a result of relevant university programs, Riyadh city also has the highest proportion of technology-skilled la-

bor in the Kingdom. Moreover, Riyadh is currently establishing high-performance public cloud services through the Saudi Telecom Company (STC), the Electronic World Trade Platform (wet) (a global trade and digital economy initiative), Arabia Capital, and Alibaba Cloud with a 40% discount on electricity tariffs for cloud service providers as part of this initiative. In an effort to achieve Saudi Vision 2030 targets, Riyadh has launched the first live public cloud data center in the kingdom through a private-public partnership. It was built as part of the company's 4-year investment plan which amounts to USD 76 million. With the data center, organizations can now access scalable cloud solutions suitable for 25 industries and 12 business areas.

The Saudi Cloud Computing Company (SCCC), a joint venture between Alibaba Cloud, Saudi Telecom (STC), eWTP Arabia capital, and the Saudi Company for Artificial Intelligence (SCAI), announced the launch of Alibaba cloud operations in Riyadh in 2022. As a result of the cloud services, local talent will be developed and trained, as well as the local economic ecosystem will be accelerated. Over the next five years, Alibaba Cloud will invest up to USD 500 million in the Kingdom and will provide world-class comprehensive reSources to support sustainability and localization.

Additionally, the region's training and management center will be established in Riyadh to better serve local consumers.

During the period 2019-20, Riyadh experienced a significant increase in the e-commerce market due to the advanced ICT and Broadband infrastructure. COVID-19 pandemic-related lockdown consumer habits contributed to the increase in e-commerce. Currently, Saudi Arabia is investing 18 billion dollars in the development of a nationwide network of data centers with a capacity of 1.3 GW.

Indicator	Year
	2019
The proportion of households with broadband subscriptions Constant	100 %
The total number of wireless broadband subscriptions for each 100 thousand of the population	91000
The percentage of the area of the city that it covers Wireless broadband (3G)	100 %
The percentage of the area of the city that it covers (4G) Wireless Broadband	75%
In public places, WIFI 142 availability points	25%

Source: RUO Indicators

As part of Riyadh's communications and information technology development program, the General Organization for Social Insurance has established a Communications and Information Technology Complex of 800,447 square meters, specially designed with all the necessary buildings and facilities for the information technology and communication industry in order to develop its various sectors. Next-generation networks (NGNs) are used by the Complex for its information and communication systems, which use internet protocols (IP). All technological services are passed through unified networks and highly accurate, smart systems that are controlled and managed by highly ranked information centers.

By collaborating with six city stakeholders and integration of 9 national strategies and program indicators through 12 KPIs, 6 Strategic Initiatives, Riyadh Smart City is an ambitious 2030 program that deploys advanced digital technologies to create a safer, more livable, more inclusive, and more connected city.

Innovation

In 2019, Riyadh had 4.3 patents per 100k inhabitants, a low level of innovation output. In terms of innovation inputs, Riyadh excels, as it has a strong Research and Development Center, the development of new sectors in fintech and technology, as well as the availability of innovative opportunities within Riyadh Ambitions 2030.

Riyadh's robust innovation ecosystem is supported by advancements in financial services and technology. Growth in financial services and ICT sectors, including insurance technology and fintech, is fostering a strong innovation environment throughout the region. Currently, the Saudi Arabian Monetary Authority (SAMA) licenses 17 fintech companies, with an additional eight in the pipeline, positioning Riyadh as a regional fintech hub. In 2022, the Ministry of Investment of Saudi Arabia (MISA) granted 700 entrepreneurship licenses to operate in Riyadh.

Riyadh Technology Valley: King Saud University has established a scientific and technological park spanning two square kilometers, known as Techno-Valley. This park brings together companies and research units and includes an incubator specializing in information and communications technology, biotechnology, medicine, pharmaceuticals, the food industry, engineering and manufacturing, renewable energy, chemicals, and petrochemicals.



KING ABDULLAH PETROLEUM STUDIES AND RESEARCH CENTER (KAPSARC)



01

150 great minds in the energy economics field from more than 20 nationalities.

02

focal point of innovation.

03

12th out of 60 research centers worldwide on Energy and ReSources.

04

15th out of 101 in MENA.

05

Open data portal with 1400 datasets.

06

Active Role in innovative data and indices.

KING ABDULAZIZ CITY FOR SCIENCE AND TECHNOLOGY (KACST)

KACST acts as a key driver for the research, development, and innovation sectors by establishing technology parks, innovation centers, incubators, and business accelerators and providing them with enabling capabilities. Its laboratories are available to support innovators, develop their ideas and transform them into start-up companies.

KACST conducts applied research and supports innovation to promote sustainable development within the Kingdom. Its commitment to national development is achieved through key objectives, including applied scientific research, coordination of national activities in the fields of research, development and innovation, and strengthening local and international partnerships to facilitate the transfer, localization and development of technologies.



Other specialized centers included in Riyadh are:

King Abdullah
International Medical
Research Center
(KAIMRC)



Prince Sultan
University 10
excellence centers



Princess Nourah
University _19
research centers



Fintech

Riyadh is among the top five cities to watch for financial technology (fintech) developments in the MENA region, with the number of startups increasing from 15 in 2018 to 150 in 2021. Funding has also surged from 30 million USD in 2016 to approximately 168 million USD in the first half of 2021. To support entrepreneurs, startups, and firms in testing their new digital solutions, the Saudi Arabian Monetary Authority (SAMA) established a reg-

ulatory Sandbox. This provides a live environment to assess the impact of new technologies, acting as a controlled and safe space with restrictions and conditions designed to protect consumers for a predetermined period. Once proof of concept is demonstrated, businesses are allowed to introduce new financial products to the market in accordance with regulations.

THIS ANALYSIS COMPARES THE TOP 10: CITIES ACCORDING TO THE MORI GLOBAL CITY INDEX OPTIMUM FACTOR ENVELOPE WITH THE ESTIMATED RIYADH CITY

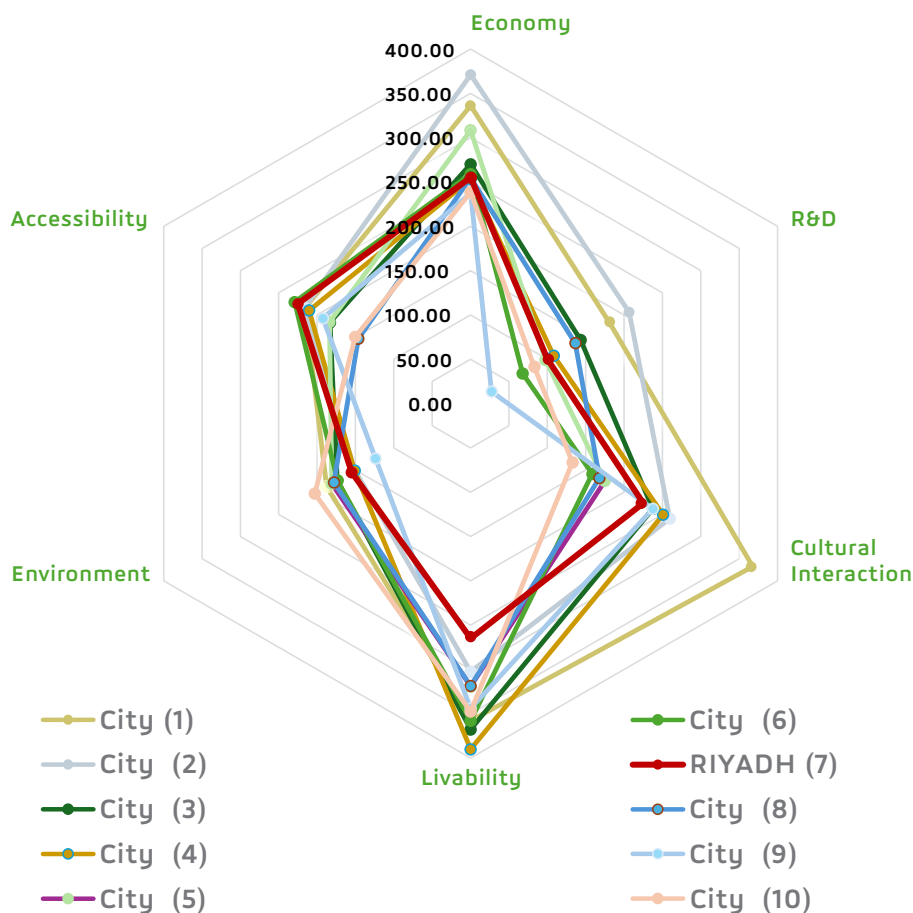


Figure 1

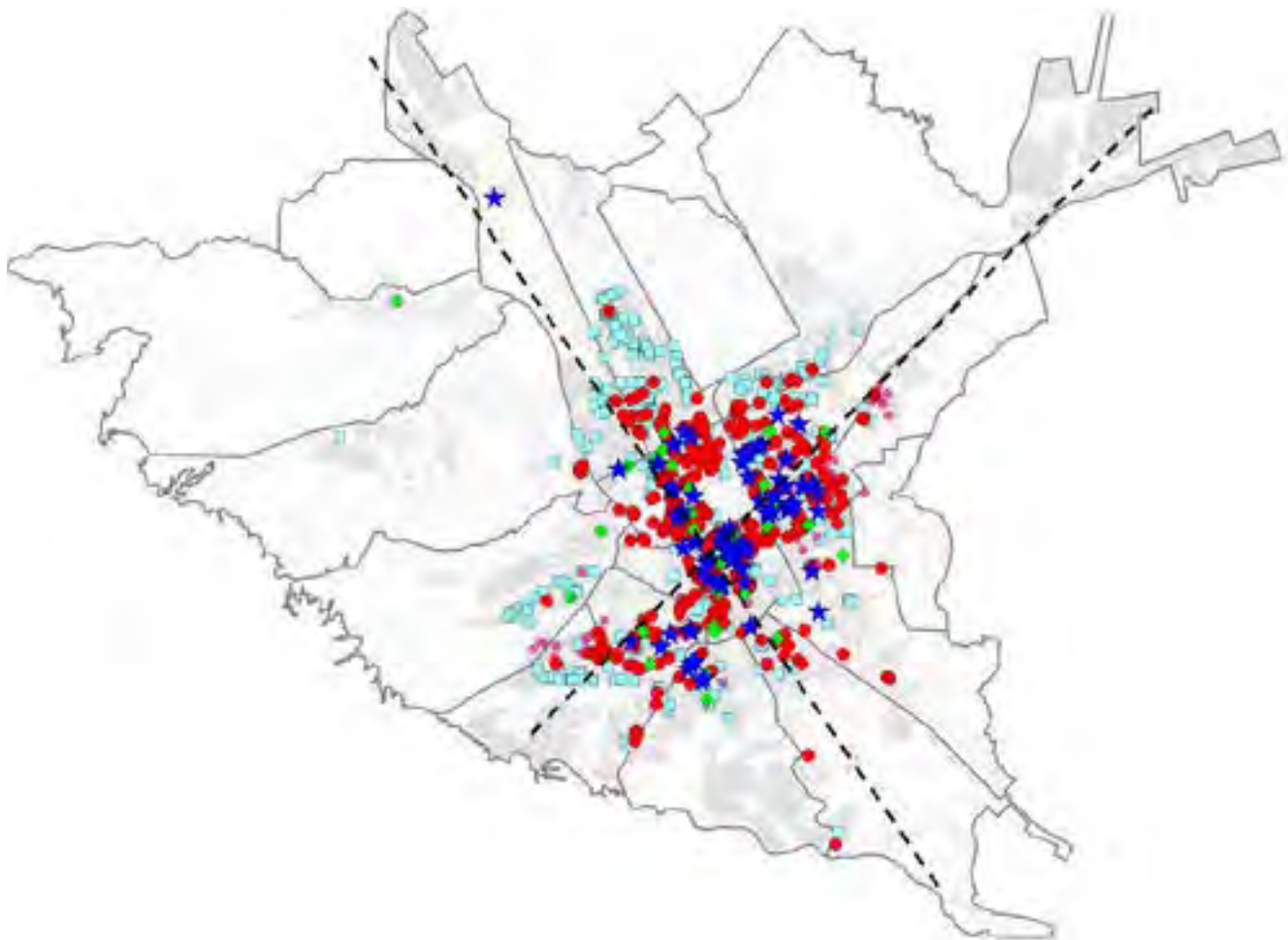
Source: Riyadh Urban Observatory (GDP Project)

2.6.2 Localization of SDG 09- Main Indicators

Indicator	Year
	2022
The percentage of individuals aged 15 years and over in the labor force	62%
Total commercial flights scheduled to depart From King Khalid International Airport within a year	193,075
The average business trip time for all means of transportation (minutes)	26
Intersection density /km ²	16
The ratio of the area allocated to the streets to the total The size of the urban area	35%
The density of street lengths in relation to the total area Urban area(km/km ²)	5.2
The number of private vehicles per 1000 inhabitants	300
Proportion of households with broadband subscriptions Constant	100%
The ratio of companies and medium and small establishments to Total business establishments in the city	20%
Percentage of workers in the tourism sector to total workers% in the city	8.7%
Percentage of Smart Water meters	100%
Percentage of Smart electricity meters	100%
Percentage of electricity network monitored by ICT	100%
Percentage manufacturing value added as a proportion of GDP	9.6%
Indicator	2023
	4604
Number of businesses per 100,000 population	

Source: RUO Indicators

Business Services Distribution Map



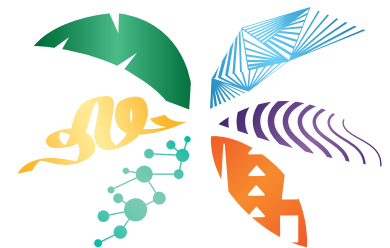
Legend City divisions:  The Greater Center (see M.D&H.1)  Sub-municipality limit
 Bank-Real Estate:  Change  Services  Bank
 Automate  Real estate

Figure 2
 Source: RCRC landuse

2.6.3 SDG 09 Related Programs in Riyadh City

EXPO 2030

Saudi Arabia has submitted its bid to host Expo 2030 to the Bureau International des Expositions (BIE), emphasizing the theme "The Era of Change: Together for a Foresighted Tomorrow." This theme aims to position the expo as a global forum and platform for innovation and foresight, promoting an inclusive world. The theme is organized around three sub-themes, one of which focuses on "A Different Tomorrow," exploring how innovation and technology, through a science-based approach, can provide new tools and opportunities. The proposed site, located north of Riyadh, covers 600 hectares and is designed to showcase the application of technologies and innovations through immersive experiences. It is conveniently situated near King Khalid International Airport (KKIA) and the King Abdullah Petroleum Studies and Research Center (KAPSARC), just one metro station away from the airport.



RIYADH
KINGDOM OF SAUDI ARABIA
EXPO 2030



World Expo 2030
Candidate



SUSTAINABLE
DEVELOPMENT GOALS

Riyadh is ready to host Expo 2030. Our Expo will be "built by the world, for the world".

We are planning to build Riyadh Expo 2030 ahead of schedule, with the broadest possible participation and opportunity-sharing, and a focus on sustainability

A comprehensive theme framework

THEME	"The Era of Change: Together for a Foresighted Tomorrow" Our theme is an invitation to the world to share how we all imagine a different future and what actions we take today to shape a prosperous and sustainable future of our shared planet.		
SUB-THEMES	A Different Tomorrow Science, technology and innovation serving the whole of humanity ethically and responsibly	Climate Action Accelerated innovations that preserve natural ecosystems and deliver sustainable solutions for all	Prosperity for All Equal opportunities for all by addressing the inequalities and inequities of our world
FORESIGHT AREAS	- The World in 2050 - Science & Technology for Humanity - Disruption, Transformation & Resilience - Ethics in Science and Technology	- Scaling Sustainable Solutions - Preserving & Regenerating Natural Ecosystems - Clean Energy for All	- Towards an Inclusive World - Access, Equality & Opportunity - Scaling Solutions for Human Needs



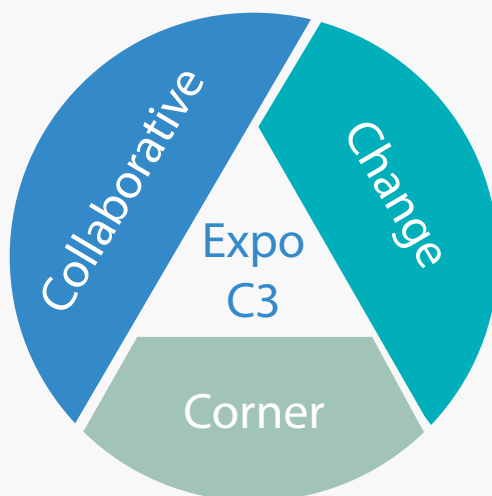
People

- Representation of nations and cultures
- Package of assistance to participation (\$350 million)
- inclusive Expo: full, equal, and meaningful participation of all countries
- One nation on e pavilion

Planet

- The first carbon-neutral Expo ever
- Clean energy and solar power
- Resource efficiency: waste-management and recycling
- Riyadh Expo C3

Expo C3-a call to participating countries to come to Riyadh in 2030 ready to present innovations and best practices in sustainability on the World Expo



Expo C3 Projects

- projects to be **financed** by Riyadh Expo
- To be considered, projects must demonstrate their **impact on one or more SDGs**

National Regional Headquarters Program (RHQ)

The National Regional Headquarters (RHQ) Program has attracted premier multinational organizations to establish their bases of operations in Riyadh, transforming the region into a leading global destination.

The Regional Headquarters (RHQ) Program was developed through a collaboration between the Ministry of Investment (MISA) and the Riyadh Chamber of Commerce and Industry (RCRC) to encourage multinational corporations to establish their regional headquarters in Saudi Arabia. As part of Saudi Vision 2030, the program aims to attract the regional headquarters of global companies to the Kingdom.

To be eligible for the RHQ program, companies must operate at least two subsidiaries or branches outside of the Kingdom. Eligible companies will receive significant incentives, including exemptions from Saudization requirements and visa limits, comprehensive business services, work permits for spouses and dependents, and other benefits.

By October 2024, 517 multinational companies had received licenses to relocate their headquarters to Riyadh. As a result of ongoing efforts to attract more firms, The goal is to attract up to 500 foreign companies, positioning the Kingdom as the leading regional hub for multinational corporations.



2.6.4 Achievements and Improvement Areas

01

Measure and evaluate the impact of RHQ on the City GDP in order to contribute to similar scalable programs and mainstream SDG09 within the RHQ program.

02

Develop an SDG impact Framework for Expo2030 in order to measure contribution to Riyadh city implementation of SDG for 2030.

03

Monitor the innovation ecosystem in Riyadh City including patents developed by the public sector in Riyadh City as a baseline in order to encourage institutional innovation.

04

Collaborate with Mushatt and the non-profit sector to develop SME Riyadh City Dashboard in priority sectors in order to develop targeted measures for Social and Women Entrepreneurs and develop city-wide indicators on financing Small and Medium Enterprises across all sectors to identify gaps and propose solutions.

05

Develop a regional transport plan combining Riyadh City and its hinterland in order to establish a baseline for the freight and logistics sector specific to Riyadh Region.

06

Coordinate with NIDLIP to monitor, assess and report on the needs of small to medium manufacturing enterprises and their adoption of sustainability practices.





2.7 SDG 11 - Sustainable Cities and Communities

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

- By 2030, ensure access for all to adequate, safe, and affordable housing and basic services and upgrade slums.
- By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, people with disabilities, and older people.
- By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated, and sustainable human settlement planning and management in all countries.
- Strengthen efforts to protect and safeguard the world's cultural and natural heritage.
- By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to the global gross domestic product caused by disasters, including water-related disasters, focusing on protecting the poor and people in vulnerable situations.
- By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.
- By 2030, provide universal access to safe, inclusive, and accessible, green and public spaces, in particular for women and children, older people, and people with disabilities.
- Support positive economic, social, and environmental links between urban, peri-urban, and rural areas by strengthening national and regional development planning
- By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and development and implementation, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels.
- Support the least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.



2.7.1 Sustainable Urban Development in Riyadh City

Safe and affordable housing

As part of Vision 2030, 70% of Saudi Arabia's population is expected to own a home by 2030, which has led the public sector and the private sector to launch a number of programs designed to assist cities in reaching that goal.

Riyadh City's housing demand is expected to increase as the city aims to become a metropolis by 2030 - its population in 2022 stood at 7.1 million. In Riyadh city, the number of residential units has increased since 2016 to reach 2.3 million, with 1.9 million families living there. As a result of the population growth expected in 2030, housing demand will be driven primarily by the influx of skilled migrants as well as the increase of Saudi residents as a result of improving the city's livability. A planned housing development will ensure that adequate housing targets are met as a result of the expected increase in population as a result of economic growth programs. It has been observed that the Annual Population growth rate in Riyadh has been steadily declining since 2004 from 4.2% and significantly decreased since

1990 from 8.8%. Riyadh's ability to grow as a skilled workforce could be positively impacted by the large strategic programs launched by RCRC and other city stakeholders. Improvements to Riyadh's livability would also contribute to sustaining the Annual Growth Rate and even increasing it.

Houses in Riyadh were previously designed for large families. The average number of family members in 2013 was 6.2, then it increased to 6.5 in 2019. Due to demographic, social, economic and labor policy changes alone, the average number of family members reduced 3.5 in 2022. This leads to increased growth in the formation of small families, which reflects the decrease in demand for large housing units in addition to the increased burden on income. Currently, 61% of housing units are apartments and 31% are villas. The city's comprehensive plan for 2028 predicts that 70% of the building stock will consist of mixed housing typologies allowing for more densification in the central areas of Riyadh.



In 2019, Riyadh's average housing density reached 1.1 inhabitants per room, from the global standards per SDG 11.1.1, overcrowding is when 3+ people share a habitable room of about 9 square meters so 1.1 persons per habitable room and average per capita habitation is around 45 square meters, which is relatively spacious due to the previous prevalence of villas as the dominant housing type.

In terms of affordability, the average cost of homeownership in relation to a Saudi family's annual income recorded a ratio of 4.6, highlighting the financial burden of homeownership. This issue has been addressed through various national programs by the Ministry of Housing, which has eliminated loan conditions and provided multiple financing schemes for Saudi families. These new measures have also removed land ownership conditions from loans, as land costs were previously at a ratio of 4.2 compared to the median family income.

These national measures are expected to lower the current ratios by 2024, making homeownership more attractive. As of 2019, housing rent comprised 19.3% of annual Saudi income, which is below the global average of 30% for housing rent burden. The availability of land, the supply of new housing units, and the delivery of various real estate projects in 2024 and 2025 are anticipated to reduce the rent burden for all families, including migrants. Monitoring the real estate sector in Riyadh to provide reliable data on land and unit transactions will help improve housing affordability and support inclusive urban growth, as 40% of land designated for housing remains undeveloped.



Housing in Riyadh is well equipped with essential services. All homes have access to electricity and solid waste collection, 98% are connected to water services, and 86% are linked to the sanitation grid. Overall, 96.1% of Riyadh's urban population has access to adequate shelter and housing.

Regarding housing density, Riyadh averages 1,193 homes per square kilometer, indicating potential for further densification¹.

(1) Riyadh Urban Observatory analysis – 2019

Safe and affordable transport

Car transportation dominates mobility in Riyadh. Approximately 98% of residents use cars, whether through ride-sharing apps, taxis, or private vehicles. In 2021, private car ownership averaged 300 cars per 1,000 inhabitants, with an average commuting time of 26.55 minutes. This reliance on car transport contributes to economic productivity losses, reduced traffic safety, and congestion during peak times.²

Riyadh has launched a comprehensive transport program with an investment of \$22.5 billion USD to develop integrated public transport networks, including metro and bus systems connected by pedestrian and cycling paths. The King Abdul Aziz Transport Program aims to Additionally, it seeks to increase the length of the public transport network from 2.2 km per 100,000 people in 2019 to 19 km per 100,000 people in 2025.³

- (2) Detailed explanation on measures for Road safety included in SDG03 review
- (3) RCRC released many publications documenting the comprehensive planning cycles for Riyadh available on RCRC.GOV.sa
- (4) For detailed analysis of Riyadh Urban SWOT, UNHabitat CPI 2019 Riyadh



Inclusive and sustainable urbanization

Riyadh has undergone multiple cycles of comprehensive planning, utilizing land use as a primary tool to address the growing demand for housing and job creation (RCRC), in collaboration with city stakeholders, has implemented specific land use and urban design codes to guide targeted urban developments. Housing is the predominant land use in Riyadh, occupying 37% of the city's land uses, followed by transportation and infrastructure at 34.32%.

Commercial and industrial land use is expected to expand. The Royal Commission for the Riyadh City RCRC is preparing a comprehensive plan leverages Riyadh's strengths while addressing its challenges.⁴

The population of Riyadh City constituted 22% of Saudi Arabia's overall population in 2022, and represented 25.3% of the nation's urban population.

Riyadh Landuse

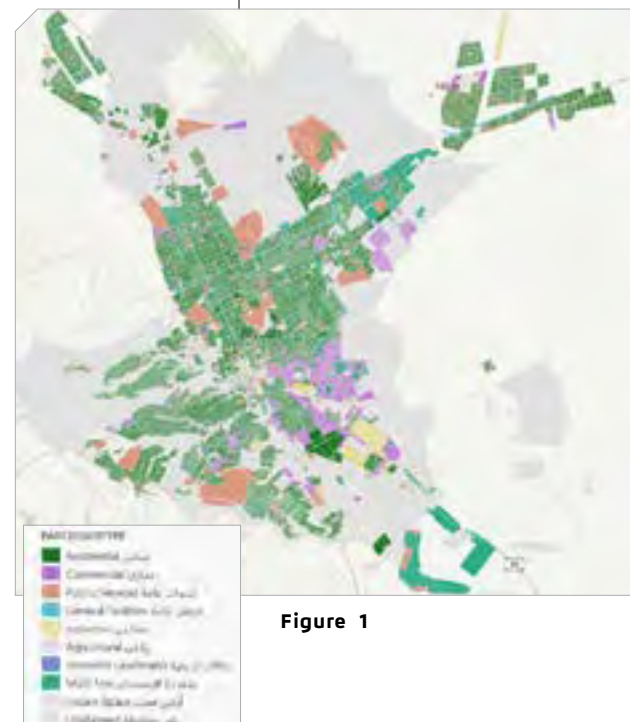


Figure 1

The urban population density within the defined boundaries of Riyadh City stands at 2300 individuals per square kilometer. This density, comparatively low when compared with figures from cities like London (5341 individuals per square kilometer) and Toronto (4430 individuals per square kilometer), suggests urban sprawl characterized by inefficient land utilization and suboptimal densities for transportation, energy, and urban infrastructure.

In response, Riyadh City's comprehensive plan delineates varied densities within the urban landscape, aiming to enhance densities surrounding metro stations through Transit Oriented Development (TOD) and focal points of employment. Densification emerges as a pivotal strategy within Riyadh's future urban planning endeavors, poised to accommodate the projected population by 2030 while fostering agglomeration to synergize transportation, economic expansion, and housing needs.

The implementation of Transit Oriented Development (TOD) along the metro network is envisioned to cultivate dynamic, sustainable, and thriving communities. This approach envisages leveraging the retail and commercial opportunities inherent in metro stations and bus stops to foster vibrant urban hubs.

Regarding inclusive urbanization, Riyadh City exhibits a population pyramid indicating that 78% of the Saudi population is under the age of 40, with a balanced distribution of men and women across all age groups. Notably, the largest demographic falls within the 10 to 25-year age range. Conversely, among non-Saudi residents, the population pyramid of Riyadh

City skews towards males, particularly in the age bracket of 25 to 49.

Forecasts suggest a potential shift in the population pyramid for the Saudi population from expansive to constrictive by 2050. Such a transition bears significant implications for urban policies, necessitating spatial plans that cater not only to youth and families but also to the elderly in equitable proportions. This shift will impact design guidelines, zoning regulations, and urban development strategies accordingly.

RCRC conducted a series of community surveys in 2013, 2016, and 2019 to measure resident satisfaction across various facets of urban life. Standardization was implemented across these surveys to ensure comparability, facilitating the evaluation of local development initiatives and the identification of areas for enhancement in forthcoming city strategic plans.

Findings from these surveys indicated that educational services, urban safety, and healthcare provision met the needs of Riyadh's residents satisfactorily. However, attention was drawn to areas such as job creation and housing in 2019. These insights have informed targeted programs aimed at enhancing quality of life, fostering economic growth, and bolstering essential infrastructure.

In line with ongoing strategic initiatives such as the Riyadh Bus Program, Riyadh Art, and Riyadh Boulevard, an upcoming Riyadh Community Survey will be launched in 2025. This survey aims to gather feedback from residents, enabling ongoing refinement and adaptation of strategic programs to align with evolving community needs and aspirations.



Pointer	Index values		
	2013	2016	2019
Population satisfaction with educational services	66%	47%	82%
Residents' satisfaction with public safety and a sense of security	84%	84%	94%
Population satisfaction with health services	75%	62%	75%
Residents' satisfaction with electricity	93%	77%	71%
Residents' satisfaction with traffic	56%	73%	69%
Residents are satisfied with the availability of affordable housing	22%	61%	66%
Residents' satisfaction with the availability of job opportunities	50%	64%	50%
Population satisfaction with educational services	66%	47%	82%

Table 1

RCRC -Riyadh City Community Survey -2013.2016-2019
(Source RUO 2019)

CULTURAL AND NATURAL HERITAGE PROTECTION⁹

Riyadh City has initiated several long-term programs aimed at conserving its natural and cultural heritage.

Riyadh city has emerged as a leader in heritage preservation through significant endeavors such as the restoration of the UNESCO World Heritage site in historic Addiriyah, the development of Al Bujairi District, and the revitalization of Al Daho District in the capital's historic center. These extensive heritage initiatives have positioned Riyadh as a global frontrunner in the restoration and construction of mud-brick structures. In recognition of these efforts, UNESCO designated the Al-Turaif District in Addiriyah as a World Heritage Site in 2010.

RCRC was additionally honored with Aga Khan awards for the Al Kindi Plaza Development situated within the Diplomatic Quarter. This mixed-use development, characterized by a design ethos influenced by Najdi Architecture, later evolved into the Salmani architectural style. RCRC further undertook restoration projects in the Al Bujairi District and Al Daho District. Moreover, efforts were directed towards the restoration of Qasr Al Hokm and its surrounding areas in Central Riyadh, aimed at safeguarding its architectural legacy.

Regarding natural heritage, Riyadh City's Wadis have been the focal point of a decade-long conservation program. This initiative commenced following an extensive geological and morphological study. The rehabilitation of Wadi Hanifah began in 2010 and is currently ongoing, encompassing phases two and three.

Wadi Hanifah stands as the most prominent natural feature of the Najd Plateau, upon which Riyadh city was established. It spans a region extending 120 kilometers from Tuwaiq to the southeast desert, characterized by depths ranging between 10 and 100 meters and widths spanning from 100 to 1000 m. Functioning as a natural watershed for floods and rainwater, Wadi Hanifah covers an area of approximately 4000 m² and comprises over 40 tributaries, with an inflow of around 700 thousand m³ of water.

(9) Detailed Overview of RCRC efforts in cultural and natural heritage could be found on <https://www.rcrc.gov.sa/wp-content/uploads/2019/10/Riyadh.English.pdf>

The valley comprises five distinct sections: the riverbed, floodplain, horizontal alluvial terraces, valleys, and branches. Along the valley banks, numerous small and large villages are interspersed, inhabited by locals predominantly engaged in agriculture. These communities cultivate a variety of crops including grains, vegetables, and fruits within arboretums, palm groves, and farms. Furthermore, the valley is adorned with numerous historic and ancient structures, wells, and dams. To address its environmental degradation, a comprehensive long-term program was initiated, encompassing the following components:

The restoration of Wadi Hanifah aims to reinstate its natural function as a regulator of rainwater, floods, and surface runoff originating from various areas within the city. Furthermore, the project aims to cleanse the valley of pollutants and reconfigure existing services accordingly.

After completion of the rehabilitation efforts, the revitalized valley is repurposed as an expansive open space, featuring walkways and recreational amenities across a sprawling area spanning 260,000 m². This transformation includes the installation of 4 kilometers of pedestrian pathways, the establishment of 4 plazas designed for various sporting activities, and the planting of 5,000 new trees.

Wadi Hanifa Project, includes the incorporation of a waterfall cascading from the top of the valley down to Namar Dam Lake, boasting a flow rate of **400** liters of water per second.



Resilience and Disasters Management

At the national level, Saudi Arabia has fortified its policy framework to empower local authorities and municipalities to effectively anticipate and respond to disasters, encompassing natural disasters, health crises, and other emergencies. In pursuit of this, the Kingdom launched a national strategy for disaster risk reduction in 2017, which is presently in the process of implementation. This strategy encompasses a national plan aimed at managing natural disasters, marine disasters, and chemical emergencies, aligning with the Sendai Framework for Disaster Risk Reduction 2015-2030.

Facilitated by the National Risk Council, a multi-stakeholder national committee was convened in 2019 to ensure coherence and synergy in disaster risk management initiatives. As part of these endeavors, Saudi Arabia has established Early Warning Systems (EWS) in numerous cities across the kingdom, prioritizing natural disaster events such as floods, earthquakes, and sandstorms, which are anticipated to escalate due to desertification effects.

Furthermore, to bolster preparedness and response capabilities, Saudi Arabia has instituted a disaster loss database, offering disaggregated data at a sub-national level.¹⁰

(10) UNDRR (2022)-ROAS-Midterm Review of the Implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030 in the Arab Region: -

Gender	Year				
	2015	2016	2017	2018	2019
Deaths					
Male	135	83	40	54	26
Female	24	30	1	3	4
Total	159	113	41	57	30
Injured					
Male	307	114	36	91	26
Female	82	29	6	3	9
Total	389	143	42	94	36

Table 2
Number of death and injuries attributed to disasters per 100,000 population (Source: Saudi Arabia VNR2023/Gstat2021)



Crisis Management in Riyadh City

In Riyadh Regarding health emergency response, the Red Crescent achieved an average response time of 21 minutes in 2022. In response to the emergence of Covid-19, concerted efforts were made in 2020 and 2021 to further diminish response times. This was achieved through coordinated collaboration among the health affairs unit of Riyadh City, the Red Crescent, and hospitals. Notably, a daily crisis dashboard was implemented to facilitate the efficient allocation of emergency and ambulatory services.⁷

For covid 19_ the nonprofit sector was very active in mobilizing volunteers, in cooperation with city stakeholders reaching out to social groups such as widows, divorcees, and orphans in providing them daily and weekly subsistence packs in addition to marginalized and vulnerable groups. One of the active non-profit Sector organizations active in Riyadh City was Al Anoud charitable association which has contributed actively to Riyadh City's response to Covid-19 and nationally in more than 18 other cities in Saudi Arabia through multiple activities and programs for mental health, food parcels, and diabetes support for patients.

Riyadh City's fast network of green spaces in cooperation with many entities was rediscovered and used as social distancing measures were taken. Riyadh City Green Parks opened after the easing of lockdown measures with greater use reported, especially for green parks and neighborhood parks inside residential areas with a proximity that does not need a car.

Riyadh City provided services to cover the parts of the city of incoming habitats offering spaces for quarantine and also making sure that evidence-based insights support interventions in dense areas. Nearly 1,900 rooms in hotels and other tourism facilities in Riyadh had been reserved for quarantine cases.

Riyadh is currently developing multiple programs that will enhance the city's resilience in order to respond to future pandemics in line with lessons learned from covid-19.

(7) Notes from Stakeholder meeting with Riyadh Health affairs and crisis unit for Riyadh City

Environmental Sustainability and Greening⁸

Riyadh has initiated the Riyadh Sustainability Strategy with the aim of enhancing the environmental sustainability metrics of the city. This strategy revolves around five primary components, namely climate change mitigation and adaptation, air quality, waste management, water conservation, and greening initiatives. Each sectoral target is harmonized with the Sustainable Development Goal (SDG) delivery timeline set for 2030.

(8) Environmental Sustainability Report for Riyadh City – 2020 – Unpublished



THE MAIN FEATURES OF THE STRATEGY

The new sustainability strategy aims to transform the capital into one of the world's most sustainable cities by 2030.

THE AMBITIOUS ECONOMIC GROWTH OF THE CITY OF RIYADH

The sustainability strategy for Riyadh city, led by the Royal Commission, encompasses 68 initiatives.

Investments in the Riyadh Sustainability Strategy are projected to total approximately \$92 billion, with the private sector serving as a key partner in its implementation.

By 2030, renewable energy Sources such as solar, wind, are expected to provide 50% of the energy production required by Riyadh.

By 2030, electric vehicles are expected to constitute 30% of all vehicles.

As a result of the Riyadh Sustainability Strategy, a new economic sector will be created in the city, 350,000 new jobs will be created.



Air Quality

Riyadh city's air quality is affected by many factors like many desert dry cities. Since 2016, RCRC has monitored air pollution levels through air quality stations around the city. Official information for 2018 shows levels of Benzene, hydrogen sulfide, sulfur dioxide, ozone, nitrogen dioxide, and carbon monoxide.

During the period (2016-2018), carbon monoxide levels were safely within the General Authority for Meteorology and Environmental Protection's standards, largely due to concerted efforts at the national level, the most relevant being the ban on imports of vehicles over five years old, and the introduction of fuel efficiency labels for new cars.

Riyadh's industrial activities are concentrated in the south, while traffic is heavy throughout the entire city.

The large area of Riyadh currently requires the use of private transportation to move between neighborhoods and roads, causing an increase in traffic density, thereby increasing nitrogen dioxide levels.

The NO₂ levels in Riyadh were below the GAMEP hourly and annual average standards in 2021, except for one monitoring station on the Northern Ring Road, which recorded an annual average of 16% above permissible standards.

Due to intense traffic activity or solar radiation in the summer, Riyadh experienced a rise in ozone levels during the summer months (July and August) of 2021.

At all stations and for all averaging periods, Riyadh's ambient SO₂ levels remained below the GAMEP limits during 2018. According to the General Authority for Meteorology and Environmental Protection, the levels of hydrogen sulfide were within acceptable limits.

Benzene levels in urban areas were within permissible limits at air quality stations for the years 2016-2018. However, there was a noticeable increase in 2018, as compared to previous years.

Traffic monitoring station benzene levels increased by 36% in 2018, while urban air quality stations recorded an increase of approximately 19% in 2018, suggesting that traffic density and vehicle emissions greatly influence atmospheric benzene levels.

Due to its geographical location, Riyadh is particularly affected by PM₁₀ and PM_{2.5} - 600 m above the desert, which is prone to sand storms and wind storms. In

2018, Riyadh's PM₁₀ and PM_{2.5} levels exceeded both the annual mean standard of the General Authority of Meteorology and Environmental Protection (80 g/m³ PM₁₀ and 15 g/m³ PM_{2.5}) and the World Health Organization Guidelines for achieving the lowest PM concentrations (20 g/m³ PM₁₀ and 10 µg/m³ PM_{2.5}).

Detailed studies are needed to determine whether particulate matter concentrations are influenced by dust resuspension (dust storms) or human activities, such as construction, transportation, and industrial processes.

Riyadh City, through a multi-sectoral committee on environmental protection and in collaboration with RCRC city partners, has launched an air quality management program. This initiative aims to monitor air quality, model data, and develop predictive models capable of issuing early warnings three days in advance. Additionally, the program involves creating an inventory of air pollutants, regularly reporting findings to both the public and the committee, and devising a comprehensive strategy to reduce Sources of air pollution while providing evidence of impact measurement.



To date, Riyadh City has implemented the following measures to improve air quality:

- Integrating components aligned with air quality improvement indicators into all new strategic programs, including specific indicators on environmental sustainability.
- Developing a Riyadh-specific air dispersion model for both mobile and stationary emission sources, accounting for regional emitters. This model will provide concentration estimates applicable to the transport, traffic, industrial, and power sectors, with plans to implement it as a cloud-based solution.
- Establish a Riyadh-specific air quality index to assess risk levels associated with exposure.
- Develop the Riyadh Air Quality Application to provide the public with real-time access to air quality information and enhance public awareness, particularly concerning health conditions.
- Successfully relocated cement factories to reduce air pollutants associated with industrial activities.
- Tested 2,279 industrial and manufacturing facilities for compliance with national air quality standards within Riyadh City.
- Monitoring of emissions from the electric facilities in Riyadh by Saudi Electricity Company through 8 monitoring stations. Two of these stations run on gas and clean fuel.
- Riyadh General Traffic Department has implemented specific tests and fines for violations of emission exhaust rules - 19% of vehicles have been denied registration because of unmet exhaust air emissions standards so far.



Waste Management

Saudi Arabia produces 1.4 kg of waste per person on a national level – twice the global average and twice the regional average. Multiple ministries and local entities are responsible for waste management, including health waste (Ministry of Health), industrial waste (MEWA), and solid waste collection (municipalities with MOMRAH).

The 3.6 million tons of solid waste collected in Riyadh City each year are only recycled 3% of the time, even though 100% of residential areas are served with frequent solid waste collection. Riyadh recycles 9% of the 30 million tons of waste it collects, a combination of medical waste, industrial waste, and sludge.

Riyadh city's solid waste is usually disposed of in a landfill in Lusail and recycled on-site.

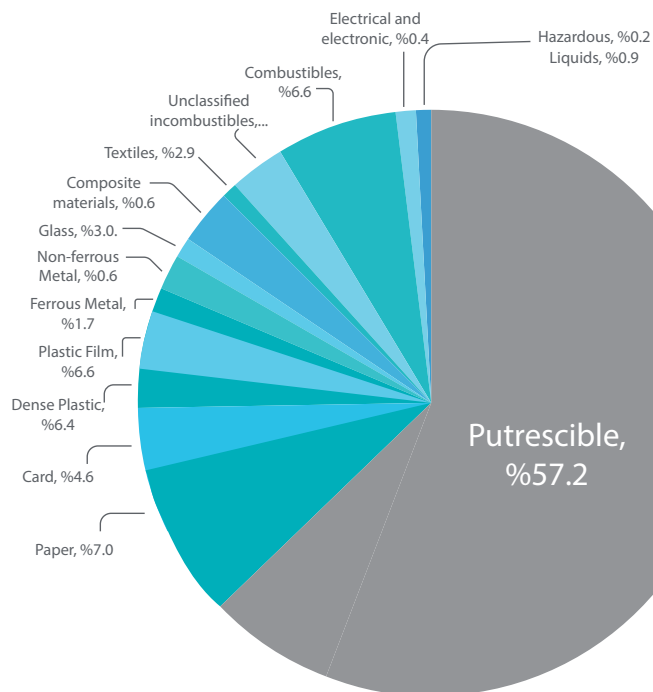


Chart 1
Solid Waste Composition Riyadh City
(Source Internal Environment Study
RCRC 2020)



In Riyadh City, approximately 80% of the waste collected for construction and demolition is sent to three waste landfills, two of which are public at al Ghanamieh and al Haer and one is private.. In addition to processing recovered aggregate materials, construction and demolition waste could be a Source of asbestos and insulation materials, as well as locating hazardous waste.

Despite its importance, Riyadh's industrial and commercial waste needs to be monitored more closely to understand its composition, especially since it also includes food waste and mineral waste. Private contractors handle hazardous waste, but their disposal facilities are not well known.

A set of protocols for managing medical waste is followed by the Ministry of Health, which separates it into waste that is handled by the medical facilities (public or private) and waste that is disposed of at a licensed facility to undergo treatment before that.

A new integrated waste management facility will be built on a 20km² piece of land located in Al Dargham area, 75km from Riyadh city. This facility will receive the range of waste generated in Riyadh, and undertake treatment activities for different types of wastes. The planned activities in the facility will include recycling of waste to generate energy, material recovery and repurposing, anaerobic treatment of organic waste, treatment of e-waste, among others.

The oldest landfill in Riyadh, Al Lusail, that is expected to reach its full capacity soon, is acting as a waste transfer facility. In order to manage landfill gas, the Riyadh Municipality has engaged in a landfill gas management project, which involves extracting gas from over 420 extraction points, using a mobile plant to process the gas or, if this is not feasible, flaring the gas in a controlled manner.

A partnership between RCRC, the National Waste Management Center, Riyadh Region Municipality, and the Saudi Investment Recycling Company was formed to increase recycling of city waste in order to meet Riyadh's sustainability goals by 2030.

Riyadh Region Municipality also attempted to recycle at the source by working with the neighborhoods of Al-Wahab and Al-Rawda in 2018 in an effort to reach 8,624 houses with promising results of 65% to 75% Source separation, which could be increased with appropriate partnerships with nonprofits and community engagement.

Further, Riyadh Region Municipality has revised waste dump fines in order to optimize enforcement of construction and demolition waste, which totalled 18 million m³ in 2018. As part of the coordination between the transport authorities and the waste department, a waste management tracking system for trucks is being set up in order to take preventive rather than punitive measures.

Riyadh is currently developing a detailed waste management plan to improve waste recycling and divert

94%
of waste from
landfills by 2030

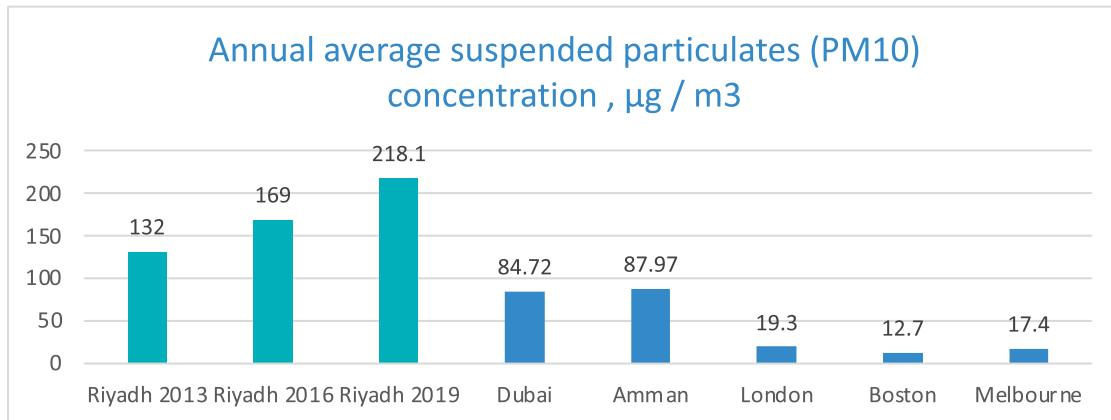


Chart 4

Source: RUO Indicators

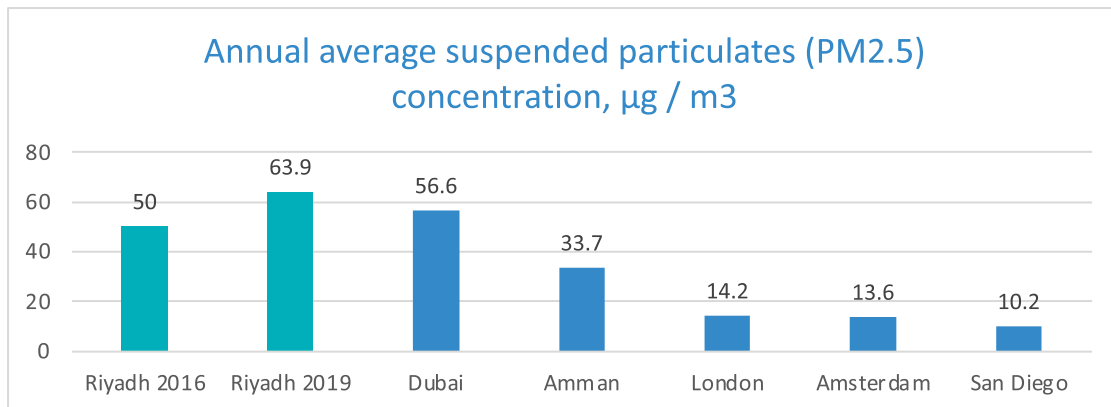


Chart 5

Source: RUO Indicators

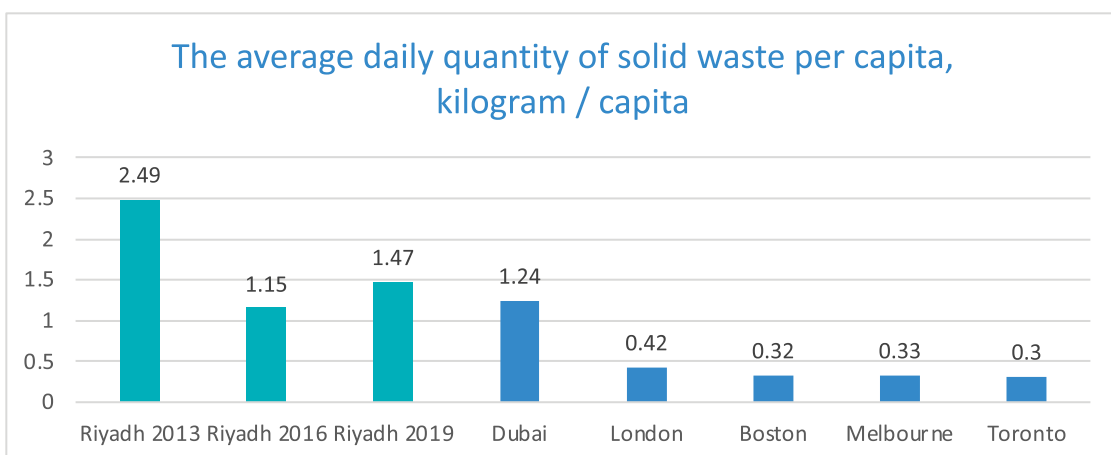
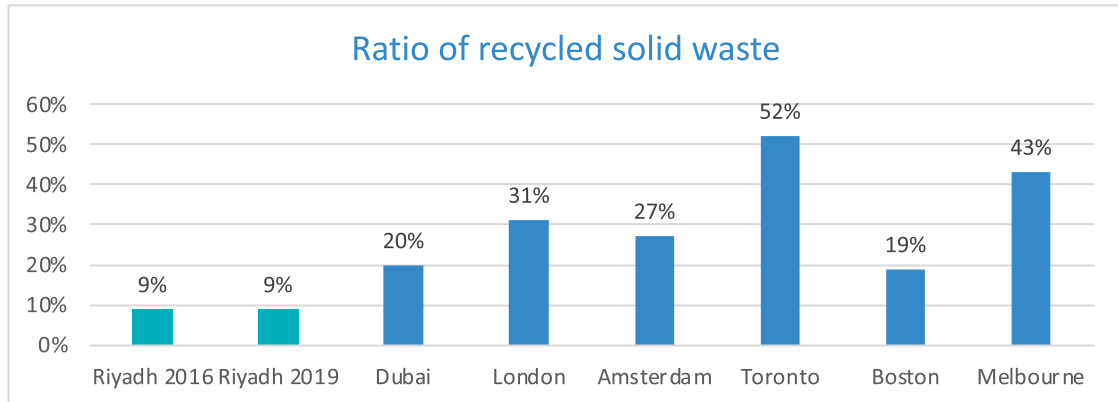


Chart 6

Source: RUO Indicators

**Chart 7**

Environmental Sustainability Indicators-Source: RUO Indicators

Green and public spaces

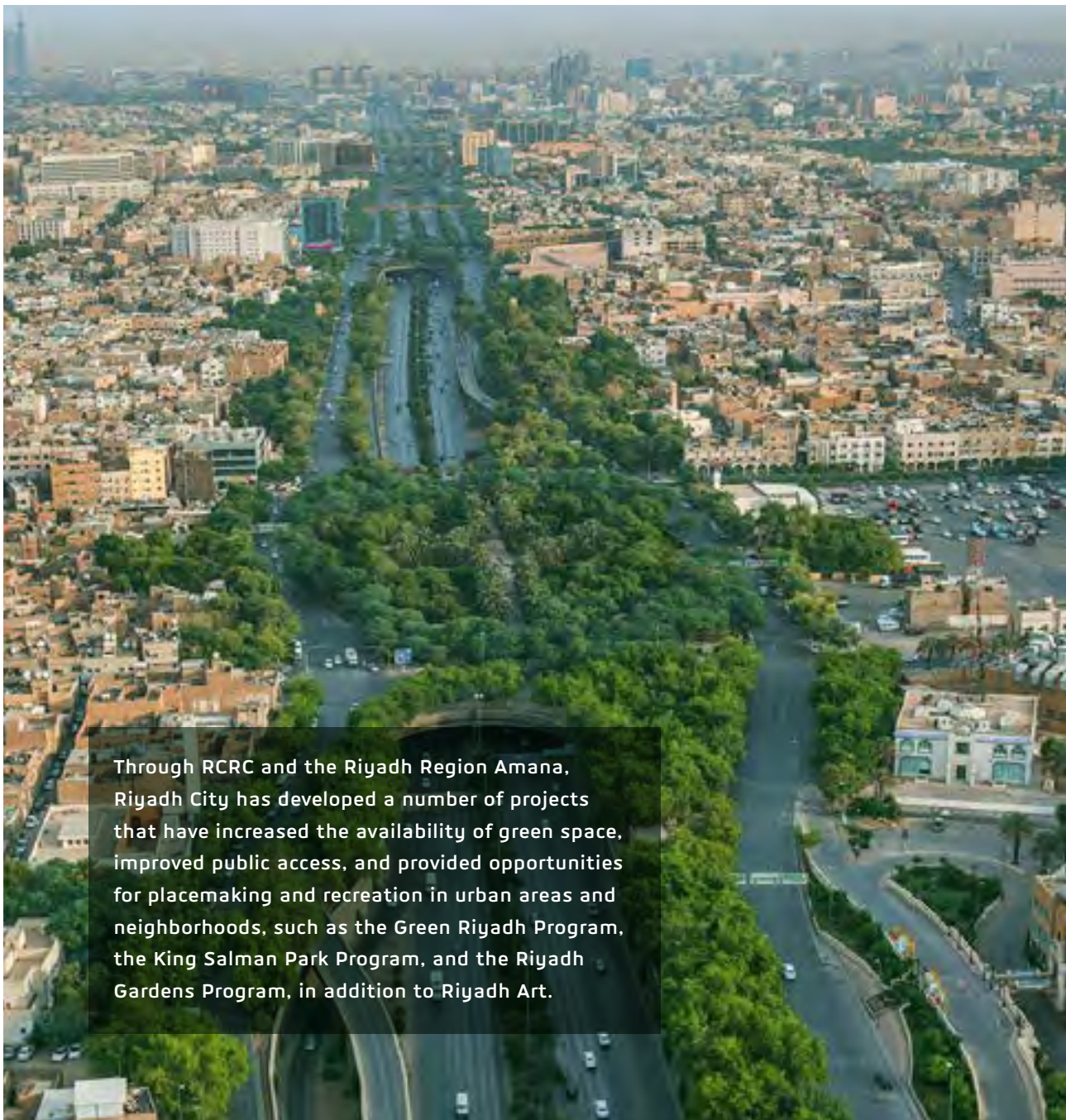
Even though Riyadh City's green cover ratio has been historically low, it stood at 1.5% in 2020. A total of 15.6 m² of green space was provided per capita - slightly higher than WHO's requirements (15m² per capita). It is on par with regional averages, but it can be improved with greening strategies. Riyadh planted 350 trees on average per 100,000 people in 2019 and 2018, far less than cities such as Melbourne (2464) or Toronto (3373). An average of 7,700 trees are currently planted annually for every 100,000 population within the Green Riyadh project

Furthermore, Riyadh city's public spaces average 0.59 km² per 100k, with an average of 4.9 m² per person in public active open spaces. Despite planning, urban design, and weather factors, only 35% of residents in 2022 lived within 300 meters of public spaces due to planning, urban design, and weather factors. Youth reported a much lower level of accessibility at 15% in 2022. There is a significant improvement in the level of these indicators compared to previous years .

Indicator	Year	
	2019	2022
Per capita (indoor public places) entertainment facilities Recreation, cultural, and sports facilities (square meters/ person)	1.6	1.9
Per capita (public open space) entertainment facilities Recreation, cultural, and sports facilities (square meters/ person)	4.9	5.1
The ratio of residents living near public spaces (less than 300 meters) to the total population	28%	35%
The ratio of youth living near public spaces (less than 300 meters) to the total population	3.80%	15%

Table 3

Source: RUO Indicators



Through RCRC and the Riyadh Region Amana, Riyadh City has developed a number of projects that have increased the availability of green space, improved public access, and provided opportunities for placemaking and recreation in urban areas and neighborhoods, such as the Green Riyadh Program, the King Salman Park Program, and the Riyadh Gardens Program, in addition to Riyadh Art.

Urban Safety

Riyadh is consistently ranked among the top 50 safest cities globally, scoring in the highest percentile for low urban crime rates. The city has recorded an average of 1.05 crimes per 100,000 people, one of the lowest worldwide, compared to Paris (2 crimes per 100,000 people) and New York (5 crimes per 100,000 people). Petty crimes such as theft are also relatively rare, with an average of 294 incidents per 100,000 people, significantly lower than Toronto's average of 1,741 per 100,000 inhabitants, indicating a comprehensive approach to urban security.⁹

In 2019, Riyadh reported only 99 violent crimes per 100,000 inhabitants, one of the lowest global averages compared to Boston's 687 per 100,000. This low crime rate is attributed to the enactment of multiple laws and policies in collaboration with international organizations, addressing the needs of children, youth, women, seniors, and people with disabilities.¹⁰

(9) Safe Cities Index
– The Economist
–2021-<https://safecities.economist.com/safe-cities-2021-whitepaper/>

(10) For detailed overview of Saudi Laws regarding human rights , a digital portal was established https://www.my.gov.sa/wps/portal/snp/careaboutyou/humanright/ut/p/z0/04_



2.7.2 Localization of SDG 11- Main Indicators ¹⁶

Indicator	Year
Indicator	2019
The number of police personnel per 100,000 residents	231
The number of murders that occurred during the year per 100,000	1.05
Number of civil defense personnel per 100,000 inhabitants	28
Number of non-profit community-based organizations per 100,000 of the population	1.6
Economic losses associated with fires and disasters Natural as a percentage of GDP The total for the city	0.001%
Response Time – Civil Defense (minutes)	10.7
Indicator	2022
City Population (inhabitants)	7.1 million
City Population growth	2.8%
City Population density (people / km ²)	2300
City Population %14 – 0	21.30%
City Population %59 – 15	74.60%
City Population %60 +	4.1%
Average number of family members (One / family)	3.7
Total number of households	1.9 million
The percentage of the population out of the total kingdom	22.8%
Response Time -Red Crescent (minutes)	22

(16) Data used From Riyadh Urban Observatory Urban Indicators

Source: RUO Indicators

Indicator	Year
	2019
The ratio of poor families to the total number of families (families) Saudi Arabia, which receives aid from the guarantee (Social)	1%
Proportion of the population living in informal settlements to the total population	0.2%
Average persons per room (overcrowding)	1.1
The per capita area of the dwelling (square meters / per capita)	45m ²
House Price Average (Ownership) based on median annual Saudi family income	4.6
The ratio of the house's rent to median Annual Saudi family income	19.3%
The ratio of undeveloped land for housing to Total residential land area	40%
Per capita green areas (m ² per person)	15.6
The percentage of recycled solid waste to the total amount of solid waste	9%
Per capita (indoor public places) entertainment facilities Recreation, cultural and sports facilities (square meters/ person)	1.6
Indicator	2022
Proportion of population living in disaster prone areas	5.73%
Housing density (housing units / km ²)	732
Proportion of housing units serviced Regular solid waste collection	100%

Source: RUO Indicators

2.7.3 Programs

King Abdulaziz Public Transport Program

Spearheaded by the Royal Commission for Riyadh City (RCRC), the comprehensive transport program has engaged multiple stakeholders within Riyadh's mobility ecosystem.

These include the Transport General Authority (TGA) as the national regulator of public transport, the Riyadh Region Municipality, utility providers (telecommunications, electricity, water), the Ministry of Interior,

the Riyadh Governor, and the Riyadh Traffic Police.

The Metro Program has developed turn-key packages to facilitate the construction of one of the largest metro and bus networks in the world. This program, which was initiated in 2013 and is set to be launched in 2025, will be operated through public-private partnerships, ensuring the provision of clean, interconnected mobility. The network will include six metro lines and 900 kilometers of bus routes, aimed at reducing reliance on private transport and lowering greenhouse gas emissions. Future lines are planned to connect the city with ongoing Giga Developments in its hinterland.

The metro system will encompass 176 kilometers and is projected to serve 3.6 million passengers daily, covering 50% of the current population.

Phases one and two of the Riyadh Bus system are currently operational. Upon full implementation, the Riyadh Bus network will comprise 842 buses operating on 80 routes spanning 1,900 kilometers, serving 2,800 stops and stations. The system is designed to accommodate an ultimate capacity of 900,000 passengers daily.

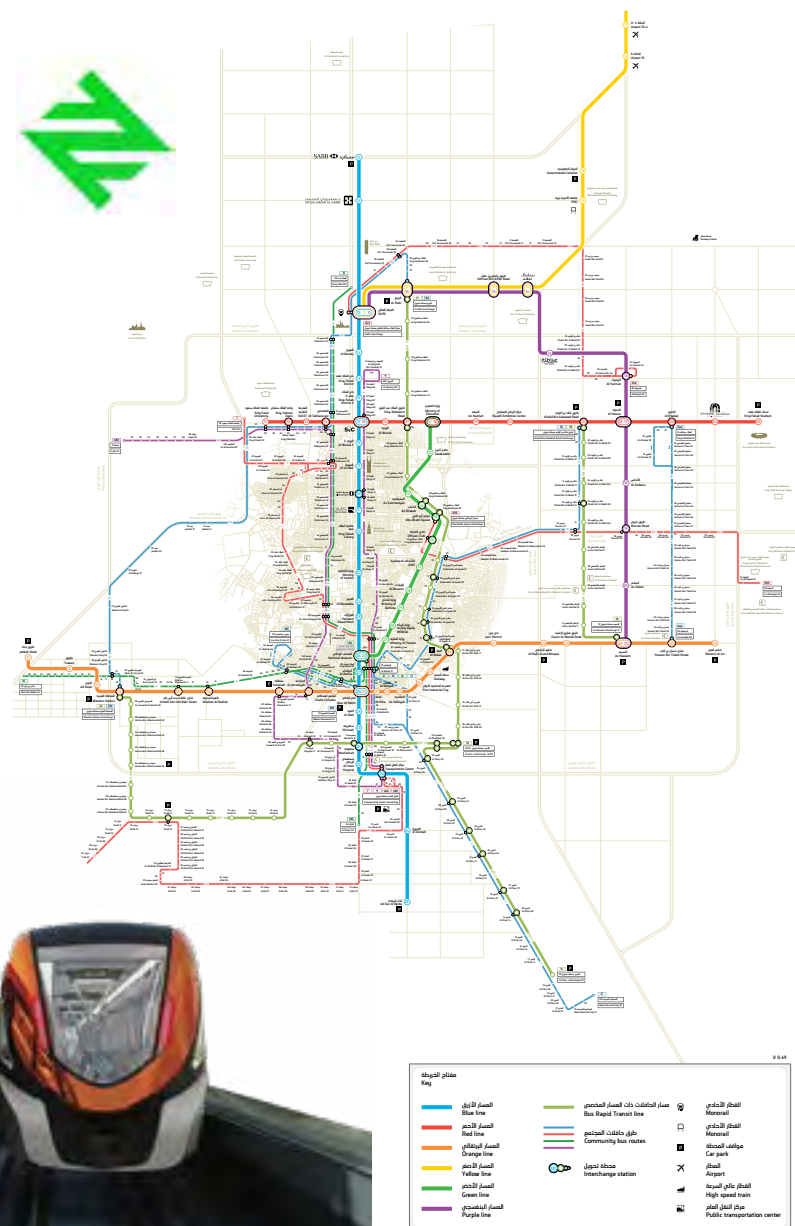


Figure 2

Source: RCRC 2023

Up to 400 billion SAR is expected to be generated in socio-economic benefits over the next 30 years as a result of the 150 billion SAR investment in KAPT assets, including:

- Fuel consumption is reduced by up to 800,000 gallons per year.
- Reduction of up to 750,000 hours in annual traffic.
- The number of accidents will be reduced by up to 100,000 annually, reducing lives, health, and material costs.
- By 2030, the need for approximately 3,300 lane-kilometers of road and roughly 39% additional parking spaces will be eliminated.
- Reduction in private car operation expenses by approximately 1.8 billion SAR annually.
- Reduction in greenhouse gas emissions by up to 3,105 tons of VOCs, 217 tons of PM, 3,990 tons of NO₂, and 12.5 million tons of CO₂. The investment to date has amounted to approximately 168 billion SAR, including operational contracts.

The project has engaged around 60,000 direct and indirect personnel across various phases of implementation. The operational phase is anticipated to create approximately 10,300 direct jobs and 13,000 indirect jobs.

This initiative for Riyadh, the capital of the Kingdom of Saudi Arabia, targets six main user segments: families, students, residents and citizens with special needs, regular commuters, and low-income workers, as well as visitors and travelers to Riyadh. The project aims to help achieve Riyadh's goal of reducing mobility-related emissions from 25% to 20% by 2030. It is projected that for every SAR invested, approximately 3 SAR in socio-economic benefits will be generated over the next 30 years.

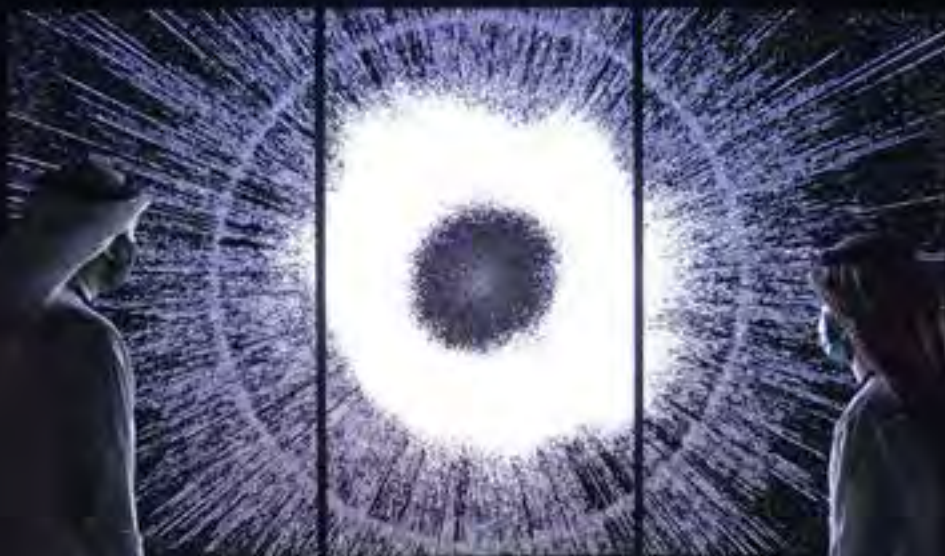
This represents one of the largest public transport investments globally to date.



Riyadh ART

Riyadh Art is the fourth pillar of the city's Vision 2030 initiative, set to deliver over 1,000 artworks tailored to fit various environments and contexts within the city. As a Creative Placemaking Program, Riyadh Art aims to integrate art into diverse urban spaces, including residential neighborhoods, gardens, parks, squares, public transport stations, and bridges. Employing a bottom-up approach through the creative industry and art, Riyadh Art engages both international and local artists to establish what is considered the largest open art gallery on a city-wide scale. The program promotes inclusion by facilitating knowledge transfer, creative expression, and empowering communities to actively shape their urban spaces through artistic endeavors.

Led by the RCRC, Riyadh Art is a collaborative program involving national stakeholders such as the Ministry of Culture, Ministry of Tourism, and the Quality of Life Program, as well as local entities like the Riyadh Region Municipality, King Abdullah Financial District (KAFD), King Salman Park Foundation, and the Sports Boulevard Foundation. Additionally, Riyadh Art is integrated with other strategic programs in Riyadh City, including Green Riyadh, Riyadh Metro, and Riyadh Bus.





Riyadh Art is rooted in placemaking principles aimed at transforming the city's public realm by emphasizing its identity and sense of place. The program encourages civic engagement with community groups and local talent, as well as young talent from around the world. It fosters the activation of the creative and art sectors as significant contributors to the city's economic growth potential. Specifically, Riyadh Art is a key driver in developing the creative economy by building the ecosystem, enabling infrastructure, and engaging in various initiatives to increase its contribution to the city's GDP.

Riyadh Art comprises 12 sub-programs that focus on integrating art, architectural monuments, and design into various urban spaces across Riyadh. These include neighborhood gardens, parks, fields, public squares, public transportation stations, bridges, pedestrian bridges, city entrances, and tourist attractions. The initiative is inclusive of diverse social groups, including artists and creatives, architects and designers, companies and industry professionals, tourists and visitors, youth, individuals with special needs, and families.

To ensure efficient implementation, a detailed, budgeted plan is overseen by a dedicated Project Management Office with a total budget of 6.56 billion SAR. The projected socio-economic impact includes the creation of 24,000 jobs, both directly and indirectly, by 2030, with 9,000 of these positions expected to be within the Creative Economy sector. This implies that for every 1 million SAR invested in cultural activities, approximately 4 million SAR is anticipated to be generated in socio-economic benefits for Riyadh City and its citizens.

An Annual Festival of Light, Art, and Innovation was held from March 18 to April 3, 2021, marking the inaugural program

“



As the first program/initiative launched under Riyadh Art, 'Noor Riyadh'.

launched under Riyadh Art. The festival's visionary theme, "Under One Sky," featured contributions from more than sixty local and international artists, showcased across thirteen locations citywide. Noor Riyadh also included an ambitious art exhibition that provided a curated survey of Light Art from the 1960s to the present, held at the King Abdullah Financial District (KAJD) conference hall from March 18 to June 12, 2021. The first edition of Noor Riyadh, organized in compliance with Covid-19 precautionary measures, attracted over 310,338 visitors in seventeen days. The festival featured over 300 events and involved 57 local and 25 international companies, with 1,326 personnel, including 498 Saudi employees, and more than 100 volunteers. In terms of public media outreach, "Noor Riyadh 2021" achieved over 442 million views through local and international media coverage, engagements, interactions, and views.

Noor Riyadh 2022 (2nd Edition)

A second edition of Noor Riyadh 2022 took place from the 3rd to the 19th of November 2022 under Riyadh Art and under its visionary/curatorial theme 'We Dream of New Horizons'. The exhibition featured 132 local and international artists showcasing 201 works of art to the public in forty (40) different locations throughout the city.

Noor Riyadh exhibition, took place at JAX Direst until 9th February 2023, features an ambitious exhibition that focuses on light-based artworks entitled 'From Spark to Spirit'. More than 2,830,114 visitors attended Noor Riyadh's Second (2nd) Edition over a period of seventeen (17) days.

As part of the festival program, Noor Riyadh organized more than 2,500 events and activities throughout this timeline, with a number of activated personnel reaching over 1930 employees for staffing assistance. In terms of public media outreach for 'Noor Riyadh 2022', communications coverage, engagements, interactions, and views reached over 1.37 billion views via local and international media; as well as digital and print channels.



Noor Riyadh 2021 (1st Edition)

Two (2) Guinness World Records Achievements

Noor Riyadh 2022 (2nd Edition)

Six (6) Guinness World Records Achievements

Map S11.46: Amazing themes for artworks for an amazing density in the Greater Center

S11.45a: Themes

	Urban Art Lab Galleries for well-known artists organized at the city squares to allow
	Joyous Gardens Playground equipment at the neighborhood parks designed by
	Jewels of Riyadh A collection of valuable artworks installed at all attractions across the
	Welcoming Gateways Creatively designed gateways at the entrances of Riyadh city.
	Art on Move Installing sculptures at the most important traffic intersections across
	Urban Flow Designing of pedestrians bridges by artists to strengthen the city
	The Hidden River Implementation of artworks that fit the nature of valleys and spread artworks
	Garden City Making a garden for arts that contains a collection of artworks and sculptures
	Riyadh Landmark An iconic landmark that symbolizes the city of Riyadh.
	Noor Festival An annual festival to exhibit illuminative interactive artworks.
	Art in Transit Spread artworks in Riyadh metro and Riyadh Bus stations.

S11.45b: Distribution

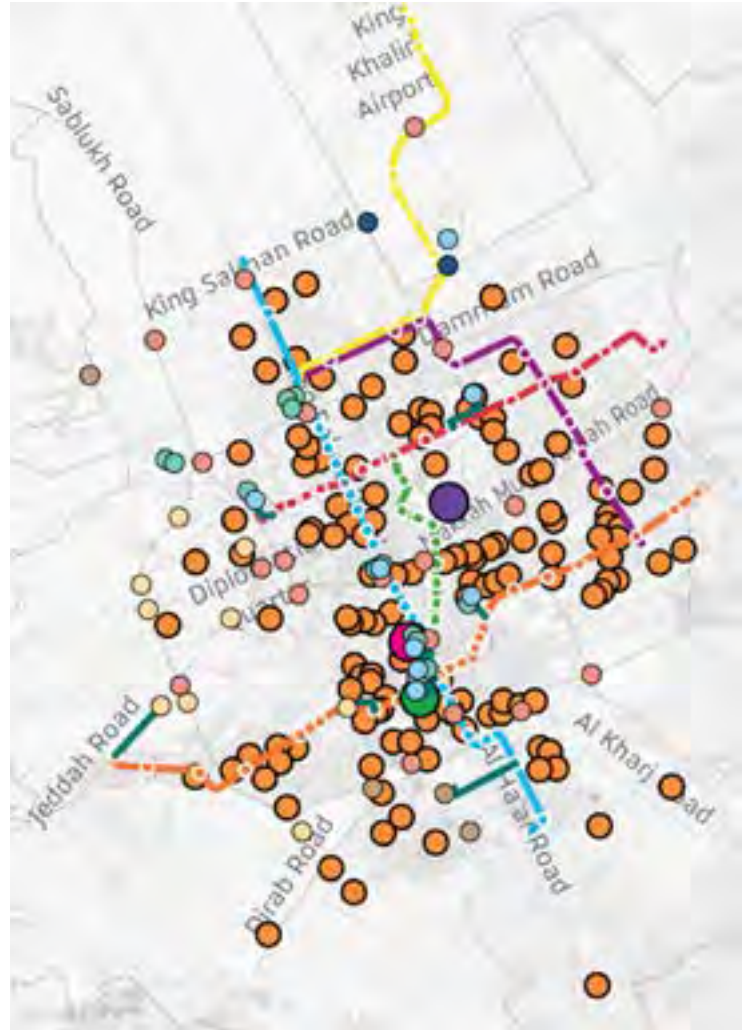


Figure 3

Source: RCRC 2023

Green Riyadh

A major part of Riyadh's four mega projects has been Green Riyadh, launched on March 19, 2019 by King Salman Bin Abdulaziz, Custodian of the Two Holy Mosques. Riyadh will achieve a key goal of Vision 2030 by promoting its ranking among the world's 100 most livable cities with this project, which will be a milestone. Riyadh city will plant 7.5 million trees in 3,330 neighborhood gardens, 43 parks, 9,000 mosques, 6,000 schools, 64 universities, and 390 healthcare facilities.

The program aims to:

- To increase green space per capita to 28 square meters, or 16 times as much as it is today.
- Increasing the amount of green space in the city from 1.5% to 9%, equivalent to 541 km².
- Increase tree planting in the city by more than 7.5 million trees, thus reducing temperatures - creating an urban canopy that maximises evaporative cooling



As a result of adding more trees to the existing urban forest, it is estimated that surface temperatures in the city will lower by 2.1°C by 2030, improving air quality and reducing energy consumption.

The program will be implemented over three phases, and it will also use economic incentives to protect the city from flooding caused by surge storms while promoting health and subjective well-being in urban areas.



Additionally, trees will line 16,400 kilometers of streets, 2,000 parking lots, 1,100 kilometers of green belts including utility lines (pylons, oil pipelines, etc.), 175,000 acres of empty land, and 272 kilometers of valleys.

Over 3,300 parks and gardens will be constructed, in addition to 43 new parks that will enhance recreational activities throughout the city.

As part of the Green Riyadh project, shading and evapotranspiration will help reduce the summer temperatures in the capital. The project will also improve the air quality by reducing dust and increasing oxygen levels.

The trees were selected after climate change scenarios assessment of Riyadh's future to ensure that they are resilient and suited to a high and moderate temperature rise.

Planting efforts will aim to balance native and non-native vegetation, preferably native vegetation whenever possible. By connecting neighborhoods with continuous green canopy and parks, people will be able to walk, engage in active recreation, and improve their quality of life. Community-based activities will connect existing landscapes to new landscapes in neighborhoods.

GREEN RIYADH BENEFITS:

- Maintains a dry weather flow in Wadi Hanifah to ensure its unique habitat and biodiversity survive.
- Surface temperature reductions.
- 127 million SAR is expected to be saved annually on electricity bills in 2030 as a result of energy reductions.
- As a result of carbon sequestration, trees should store 188,000 tonnes of CO₂ per year.
- It is estimated that dust emissions will be reduced by 859 tons a year.
- 72% increase in intercepted water will be achieved in an urban flood that occurs every 100 years.
- Residents and citizens of Riyadh will benefit from reductions in health costs and of well-being.



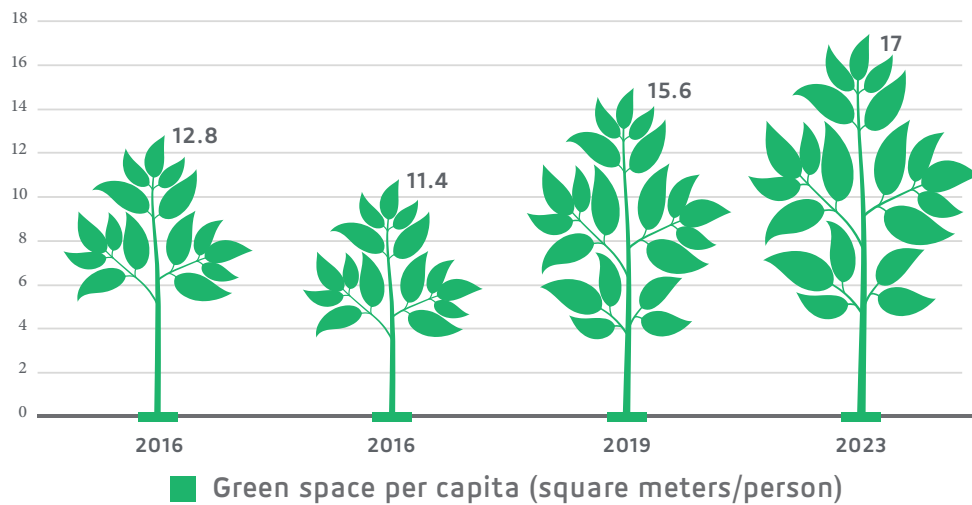


Chart 2

Source: RUO Indicators

The number of trees transplanted annually in Riyadh City Per 100 thousand of the population

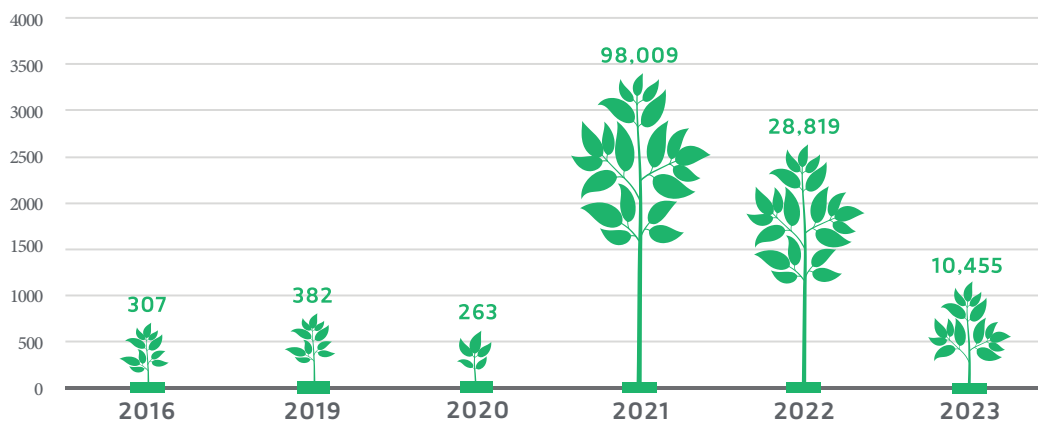


Chart 3

Source: RUO Indicators



In 2023, Riyadh planted



2,000 trees daily,

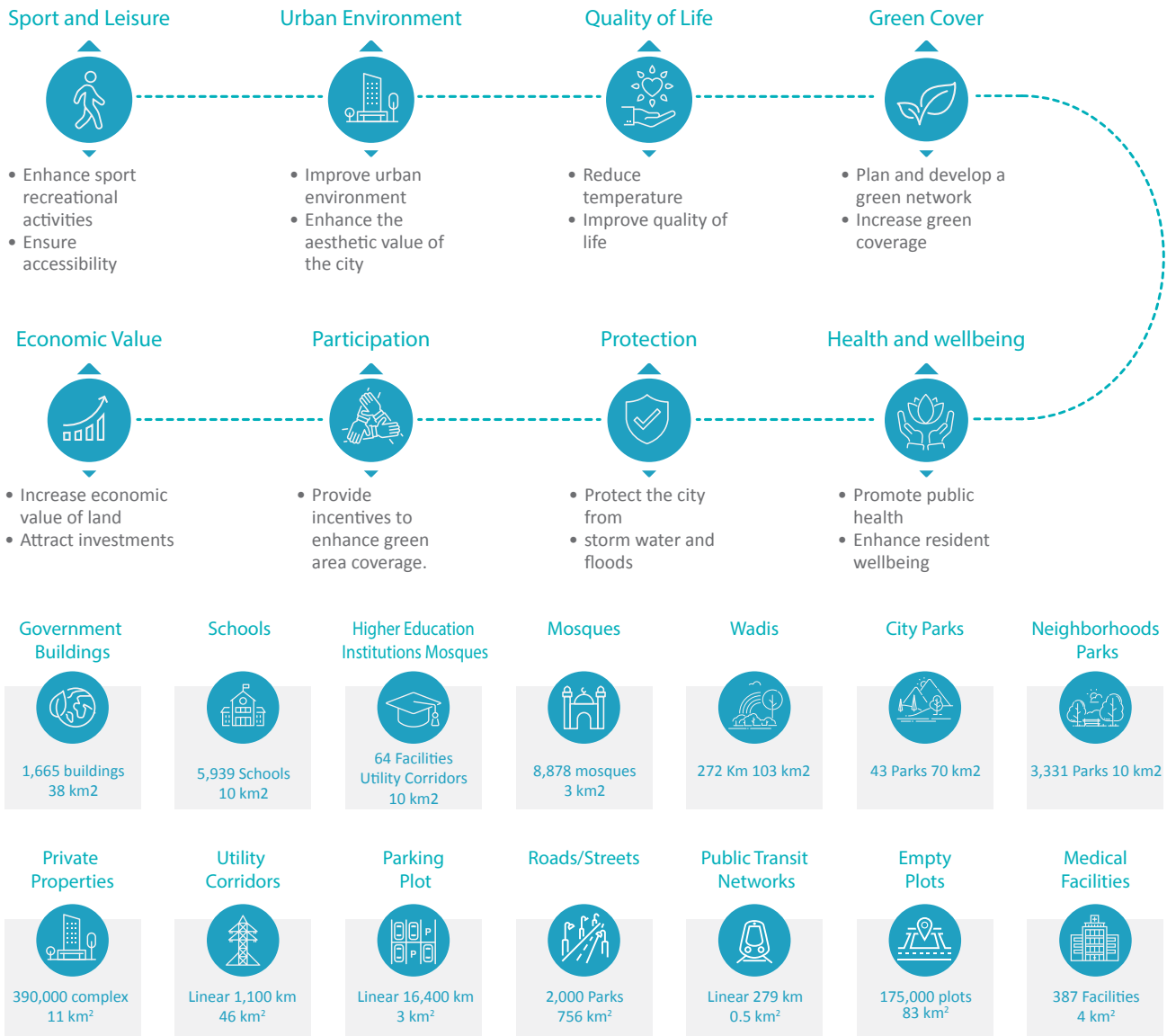
with the assistance of



50,000 volunteers



Green Riyadh Benefits - A Summar



Green Riyadh

17%



BY 2030

7.5

Million trees across the capital

parks 2030

770 thousand km² - Orouba park
4.3 million m² - King Salman park
7 million m² - Earmarked for large parks

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



17 PARTNERSHIPS FOR THE GOALS



BY 2030



1.5

Million m² of forestation of Wadis in Northeast Riyadh RIYADH

3.7

Million m² of upcoming forestation to be finished in 2023

Main Corridors 2023



5

Main urban corridors completed

11

Additional urban corridors and main roads currently undergoing ongoing

Gardens, Roads, Mosques, Schools 2023



249

New gardens

433

Km of local roads

361

Mosques

162

Schools

Green Riyadh



Green Riyadh adopted a participatory approach to engage the community in greening neighborhoods in the city :

- Youth
- Women
- Elderly
- Community associations



Al Daho District Renovation Project

Al Daho District Renewal Project aims to preserve and revitalize the historic district in an environmentally friendly and inclusive manner while contributing to local development and preservation of cultural heritage in the city. The project is led by Royal Commission for Riyadh City (RCRC) in collaboration with Riyadh Municipality with the participation of national entities - Ministry of Tourism, Quality of Life Program (QoL), National Water Company (NWC), Ministry of Transportation (MOT), Supreme Commission for Tourism and Antiquities (SCT&A) and in cooperation with the landowners and private sector -Private Investors and Developers.

Al Daho District Renewal Project began in 2016 and was completed by 2020, encompassing the development of a conservation, restoration, and maintenance plan, promoting public awareness, and ensuring that the site is accessible and usable for current and future generations by fostering community involvement and participation in preservation.

In order to conduct conservation and restoration work, extensive documentation was performed through archival research, oral history interviews, and archaeological investigations, including

stabilizing foundations, repairing historic features, and cleaning and preserving artifacts. Adaptive reuse was used, such as converting a historic building into a museum or community center.

The impact of the COVID-19 Global Pandemic on the construction and building industry, as well as supply chain logistics, was significant. The nature of the work posed new challenges to the supply chain.

Despite these difficulties, the project team has implemented mitigations to expedite efforts and work towards completing the project and delivering it to the relevant stakeholders for implementation. Ultimately, it aims to integrate new areas of social amenity for Riyadh's residents and visitors to benefit from culturally.

A key aspect of the Al Daho District Renewal Project is to elevate and promote such cultural aspects of the city to improve the overall quality of life there.





Riyadh Air Quality Management

In the Riyadh Air Quality Management App, Riyadh Environment records air quality and provides real-time updates based on the level of pollutants. Apps display air quality readings according to the user's location and the nearest air quality monitoring station based on the user's location. In response to a user's geographic location, the App displays an air quality reading from the nearest air quality monitoring station. It also provides two sub-indicators associated with air quality.

Carbon monoxide and nitrogen dioxide gasses are displayed in the first sub-indicator. As for the second sub-indicator, it monitors whether aerial planktons are smaller than 10 micrometers in diameter and suspended particles are smaller than 2.5 microns in diameter; both of which can enter the human respiratory system and penetrate the lungs.

Since 2015 through 2019, more than 40 million readings have been collected from verified data. All RCRC stations have exceeded the international standard for acceptable data quality of 75% or higher.



Stations reported the lowest detection accuracy at 96.8%, and the highest at 99.6%

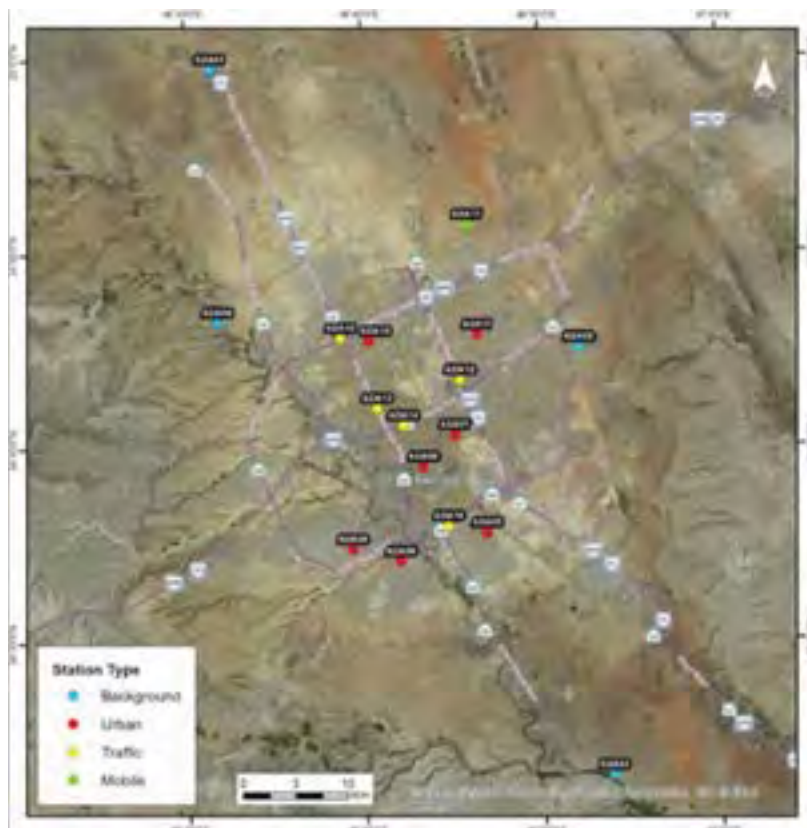


Figure 4
Source: RCRC 2023



Riyadh air quality sensor network



17

Stations



10

Types of air
pollutants



4.2

Million data
points in 2022



103

Sources of air
pollution
identified

Noise pollution



80

Locations sources
of noise pollution



30

Noise pollution
stations across
Riyadh City



1350

Km of irrigation
water networks
under
construction



1.7

M3 of water
carried by
irrigation water
networks

water networks



Wadi Hanifah strategic long-term program

Program elements:

With three water levels, streams and tributaries are cleaned regularly and maintained along a 57 km water channel that measures 6 meters wide.

A water treatment system that is natural and non-chemical can create a viable environment for microorganisms that consume organic and non-organic components.

Over an area of more than 100,000 m², bioremediation facilities provide sufficient levels of dissolved oxygen (DO) to kill coliform bacteria and create favorable conditions for microbes, fish, and other aquatic life. Furthermore, the facility features 140 bio-cells 30 meters long and 2 meters deep Paved walkways for pedestrians.

Besides 47 kilometers of walkways overlooking the valley, there are 7.4 kilometers of pathways paved with rocks near magnificent rock formations, green areas, and streams. Paved walkways facilitate wheelchair and pushchair access, and there is an electric aeration system to improve the treatment process. Seats and rest areas are also provided.

- A total of 30,000 desert trees and 7000 palms were planted in the valley's bed, as well as 2,000 other desert trees such as acacia, acacia tortilis, and Salam. In addition, about 50,000 small trees were planted using seeds and seedlings.
- In Elab Dam Park, visitors can enjoy 5.5 kilometers of pedestrian walkways, 93 rest areas, and 200 parking spaces along the roadside. Moreover, the Park features a paved and afforested pedestrian passageway with lighting units that measures 2 kilometers long.
- Wadi Hanifah Dam Park: The park has 27 rest areas and a walkway of 5.6 kilometers.
- Bioremediation Facility Park, Utaiqah: There are 52 rest areas and 1100 meters of walkways in the Park.
- Al Sadd Al-Hajari Dam Park: A paved pedestrian walkway surrounds the lake dam, which is two meters deep and covers approximately 10,000 square meters. The lake dam is also surrounded by benches for picnickers.
- Factories' lake Park: The park includes four kilometers of walking paths and 22 seating areas, while the lake itself covers 40,000 square meters and is 10 meters deep.
- Al-Jaz'ah Lake Park: There are 5.5 kilometers of pedestrian walkways, 37 seating areas, and a 35,000 m² lake that is three meters deep.
- Wadi Namar rehabilitation project with 520 palm trees planted along the pedestrian walkway, while the heart of the valley was planted with 9500 trees supported by an extensive irrigation network.



- Namar Dam Lake measures 2 kilometers in length, 170 meters in width, and 20 meters in depth, its total area is 200,000 m². In addition to being one of the most fascinating attractions in the region, the lake serves as a deodorizer and refresher of the fungal life in the park and surrounding areas.
- A 3100-meter permanent water channel with a width of 8 meters and a depth of 1.5 meters was constructed from Namar Dam to Wadi Hanifah.

Corniche:

Located on the walkways overlooking the lake dam, the two-kilometer corniche is lined with palms and public utilities. It also has a special area, where pedestrians and picnickers can enjoy the lake's view. Visitors can also marvel at the ends of the lake and the corniche from the entrances.

Wadi Namar Lakeside Park project



Wadi Namar,
South of Riyadh,
stretches from west
to east

2

Km long, 170m wide,
20m deep



200

Thousand m² (total area
of lake), 2km corniche



Refinement of
flood streams



Upgrade of infrastructure: local
routes, lighting, corniche
overlooking the lake dam



Local farm owners
and hikers paths



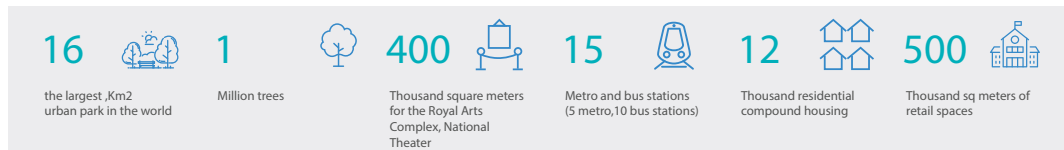
King Salman Park

King Salman Park occupies the former airport site in Riyadh, and is often referred to as Riyadh's green lung. The Park covers over 16 square kilometers of space and will serve as a destination for leisure, arts, culture, sports, entertainment, and innovation; all while being surrounded by nature.

The project serves both as an outdoor space where people can go to walk and cycle among nature and as a destination where people can go to enrich their social life as well. The park will be home to several museums, a sports facility, a golf course, an equestrian center, as well as an art complex, visitors pavilion, several museums, and a visitors pavilion.

Upon completion, the park will be seven times larger than Hyde Park in London and five times larger than Central Park in New York City, making it the world's largest park. Currently under construction, the park is expected to be open in 2025. As the Riyadh air base (the old airport) grows rapidly, it offers an enormous opportunity to gain 13.2 km of green space in its heart.

Surely, it will compete with the most beautiful urban parks in the world like Central Park (New York, USA, 3.41km²), Hyde Park (London, UK, 1.4km²), or Bukit Timah (Singapore, 1.64km²).





Diriyah

Located 7 km from Riyadh city, Ad-Diriyah is a mixed-use destination, which is the seat of a historical city. The Diriyah Gate Development Authority (DGDA) is conducting the Ad-Diriyah Gate Project, which allows access to the Najd plateau's 300-year heritage. Certainly, the project will serve as a multicultural crossroad for 25 million visitors annually. Phase one of Ad Diriyah's master plan has recently been awarded a Platinum Leed Certificate.

01

Over 19 hotels and resorts.

02

Over 3,000 hotel rooms across Diriyah Gate.

03

Over 5 museums.

04

Over 5 cultural academies.

05

Restoration of 2.5k square meters at Wadi Hanifah.

06

27 million visitors are expected by 2030.

ROSHN

A Saudi community developer and PIF project, aims to increase home ownership to 70 percent within the next ten years, under the leadership of HRH Crown Prince Mohammed bin Salman.

As part of Vision 2030, ROSHN will improve residents' quality of life, provide jobs and create opportunities nationwide, with a special focus on the capital city, Riyadh. As part of Roshn's public-private partnerships with medium-scale developers, Roshn provides detailed construction codes and guidelines to help developers deliver and implement Roshn communities.



To achieve a homeownership rate of 70% in the Kingdom

Having signed 6 partnership contracts worth USD 426 million, the company will develop the first phase of its integrated neighborhoods in Riyadh. Encompassing more than 30,000 homes on an area of more than 20 million square meters

The goals for ROSHN include:

01

Assuring Saudi nationals can own their own homes based on their needs and finances;

02

Enhancing the quality of life for current and future generations;

03

Providing superior living experiences to current and future generations;

04

Improving access to subsidized and appropriate funding and increasing the supply of affordable homes;

05

Contributing to the advancement of legislative and regulatory environments;

06

Enhancing business growth through strategic partnerships with local companies.

- Annually monitor population growth to identify its driving factors, such as economic expansion and sectoral developments, with a focus on the diversity of the population and the skilled workforce. This approach aims to accommodate growth in alignment with housing, infrastructure, and services strategies.
- Prioritize densification in future urban plans for Riyadh to promote the integration of transport, housing, land use, and economic growth for sustainable urbanization.
- Establish a governance structure for monitoring and reporting progress on SDG11 targets and indicators for Riyadh City. Implement annual follow-up and review procedures, producing thematic working papers to inform decision-makers about the progress.



2.8 SDG 17 - Partnership for Goals

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

FINANCE

- Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.
- Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 percent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 percent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 percent of ODA/GNI to least developed countries.
- Mobilize additional financial resources for developing countries from multiple sources.
- Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief, and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress.
- Adopt and implement investment promotion regimes for least developed countries.

TECHNOLOGY

- Enhance North-South, South-South, and triangular regional and international cooperation on and access to science, technology, and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.
- Promote the development, transfer, dissemination, and diffusion of environmentally sound technologies to developing countries on favorable terms, including concessional and preferential terms, as mutually agreed.
- Fully operationalize the technology bank and science, technology, and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

CAPACITY-BUILDING

- Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans and implement all the Sustainable Development Goals, including through North-South, South-South, and triangular cooperation.



TRADE

- Promote a universal, rules-based, open, non-discriminatory, and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda.
- Significantly increase the exports of developing countries, in particular, to double the least developed countries' share of global exports by 2020.
- Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access.

SYSTEMIC ISSUES

POLICY AND INSTITUTIONAL COHERENCE

- Enhance global macroeconomic stability, including through policy coordination and policy coherence.
- Enhance policy coherence for sustainable development.
- Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development.

MULTI-STAKEHOLDER PARTNERSHIPS

- Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology, and financial reSources, to support the achievement of Sustainable Development Goals in all countries, in particular developing countries.
- Encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships

DATA, MONITORING, AND ACCOUNTABILITY

- By 2020, enhance capacity-building support to developing countries, including least developed countries and small island developing States, to increase significantly the availability of high-quality, timely, and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location, and other characteristics relevant in national contexts.
- By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement the gross domestic product and support statistical capacity-building in developing countries.

2.8.1 Partnerships for Sustainable Urban Development in Riyadh City

Finance

New Murabba Development – The New Downtown for Riyadh. This project will encompass over 25 million square meters of floor area, featuring more than 104,000 residential units, 9,000 hotel rooms, and over 980,000 square meters of retail space. Additionally, it will include 1.4 million square meters of office space, 620,000 square meters of leisure assets, and 1.8 million square meters dedicated to community facilities. Valued at 800 billion USD, this development will be funded through the Public Investment Fund in partnership with the private sector. The project is expected to generate 334,000 direct and indirect jobs and contribute 180 billion SAR (47.98 billion USD) to the national GDP.

King Salman International Airport in Riyadh will feature six parallel runways and is projected to contribute SAR 27 billion (USD 7.18 billion) annually to Saudi Arabia's non-oil GDP. The airport will significantly boost annual passenger traffic in Saudi Arabia from the current 29 million to 120 million travelers by 2030 and 185 million by 2050, with aircraft traffic increasing from 211,000 to over 1 million flights per year. Designed with sustainability at its core, the new airport aims to achieve LEED Platinum certification through advanced green initiatives and will be powered by renewable energy. The development will enhance cargo processing capacity to 3.5 million tons by 2050, create 103,000 direct and indirect jobs, and contribute USD 7 billion (SAR 27 billion) to the national non-oil GDP.

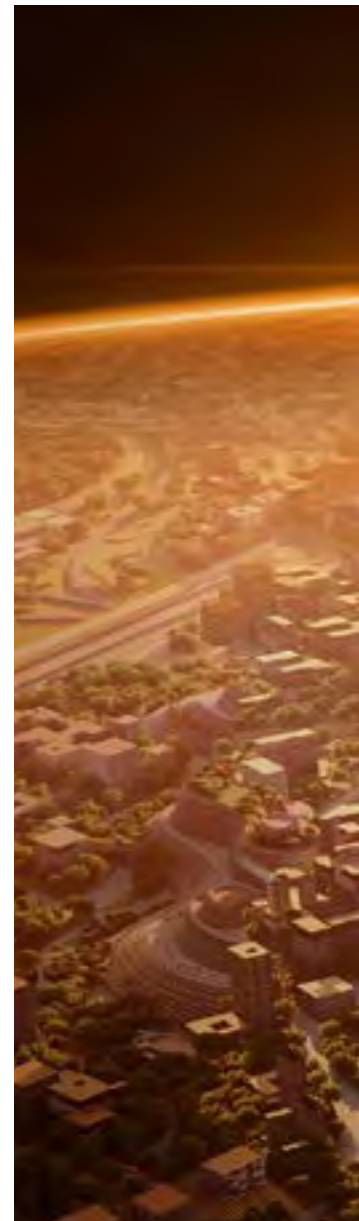
The Royal Commission for Riyadh City (RCRC) has allocated USD 21 billion for the development of

significant urban programs, with a total of USD 170 billion planned until 2030. To date, USD 12.2 billion has been awarded for construction works in Riyadh, focusing on enabling infrastructure. In 2023, the Center for Infrastructure in Riyadh was established to coordinate the efficient delivery of these extensive infrastructure programs.

The four major projects include King Salman Park, Riyadh Green, Sports Boulevard, and Riyadh Art. His Royal Highness Crown Prince Mohammed bin Salman will chair the committee overseeing these projects.

The four projects will complement Saudi Vision 2030's "Quality of Life" Program and align with the UN Sustainable Development Goals, focusing on creating sustainable cities and communities and addressing climate change. These initiatives are expected to generate 70,000 new jobs for citizens across various sectors and present investment opportunities worth SAR 50 billion (USD 14 billion) for both local and foreign investors. Implementation began in the second half of 2019.

Additionally, the Saudi Central Bank (SAMA) has injected USD 13 billion to support the financial services sector, positioning Riyadh as a central financial hub. The King Abdullah Financial District (KAFD), designed as a LEED-certified development adhering to green building guidelines, also houses the headquarters of the Saudi Stock Exchange and the Capital Market Authority.



Technology

Riyadh is benefiting from the National Framework and regulations around technology in Saudi Arabia, which aim to position the country as one of the most technologically advanced in the world. The Saudi government has committed 2.5% of its GDP to the research, development, and innovation sector by 2040. The private sector, particularly the Saudi Telecommunications Company Group (STC Group), has significantly contributed to this technological transformation by providing high-capacity submarine cables.

As an early adopter of advanced Artificial Intelligence applications, the Saudi government, through Sadaia, has implemented 55 platforms in national entities to monitor public finances, collected SAR 382 million in contributions from 3 million charity donors, and developed award-winning applications such as Tawakalna, ranked 3rd worldwide with 23 million downloads. Furthermore, electronic government services have been provided to 22 million users and 600,000 businesses through Absher, which operates through advanced cloud services supported by 169 integrated data centers.



Trade, Investment, and Promotion

Riyadh City is emerging as a significant hub for international trade, with the number of active foreign investment licenses reaching 3,551 by 2021. Comprehensive data on Riyadh's trade activities is not yet available, as MISA typically reports trade volumes on a regional level.

Multi-Stakeholder Partnerships

The Riyadh City Strategy 2030, currently under study, has involved extensive stakeholder engagement, connecting with over 100 city stakeholders at local, regional, and national levels. The Royal Commission for Riyadh City (RCRC) collaborates with more than 40 city stakeholders across four strategic urban programs: Riyadh Sports Boulevard, Green Riyadh, Metro Riyadh, and Riyadh Bus. Additionally, the Riyadh Urban Observatory has coordinated efforts with over 60 stakeholders to gather data on the city's urban indicators.

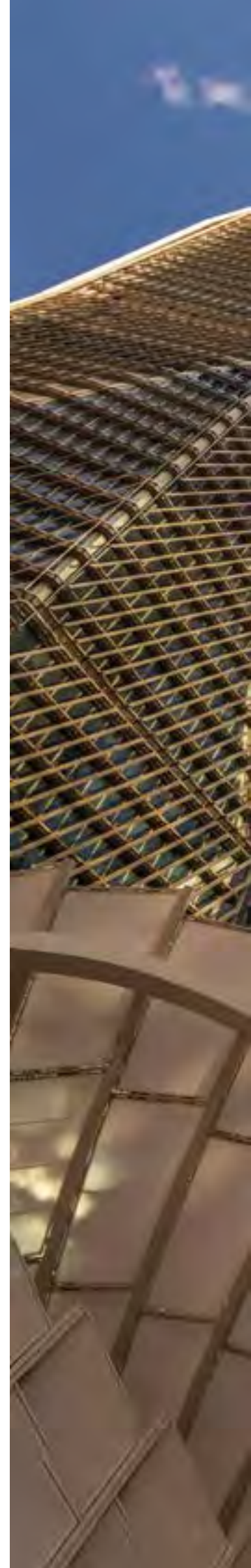
Data, monitoring, and accountability

Riyadh City is ranked 30th globally in the Smart City Index 2021, marking an impressive rise of 41 positions since 2019. It stands as the sixth fastest capital globally in terms of 5G network performance, boasting an average download speed of 384.66 megabits per second in the first half of 2021. The city has attained a high level of connectivity, with 100% of its population subscribed to the internet and having access to advanced mobile services.

Regarding data management, Riyadh City's protocols are governed by the national regulatory framework under SADAIA. The Royal Commission for Riyadh City (RCRC) and other city stakeholders have localized these national data regulations by establishing local data management offices. These offices are responsible for implementing processes and procedures for data management, including open data initiatives, data classification, and tailored data management based on data types and usage. RCRC is also planning an open data portal to build on the success of the National Open Data Portal, which has attracted 40.9 million users and received 313,000 responses, achieving a 98% digitization rate for services.

For governance of urban indicators, the Riyadh Urban Observatory has implemented a comprehensive governance structure, organizing multiple working groups thematically based on the focus areas of the indicators. In alignment with the Sustainable Development Goals (SDGs), eight dedicated working groups have been established. These groups will collaborate throughout 2023 and 2024 to integrate SDG indicators into relevant strategic programs and urban policies.

In 2021, the Council of Ministers established the Riyadh Urban Observatory as the Riyadh Local Data Hub. However, its activation was delayed due to the advent of Covid-19. The hub was reactivated in 2023, accompanied by a strategy for 2025 aimed at fully operationalizing the hub and establishing a local statistical strategy aligned with the National Statistical Strategy announced by Gstat in 2022.





2.8.2 Localization of SDG 17- Main Indicators

Indicator	Year
	2021
City Gross product per capita (USD)	30,589
Indicator	2022
	2022
Gross city operating budget per capita (USD)	9,225
Number of non-profit community-based organizations per 100,000 of the population	5.2

Source: RUO Indicators

2.8.3 Programs

Riyadh Urban Observatory – capacity development programs in partnership with UNDP for Sustainable Development

Established in 2013 under the auspices of the Royal Commission for Riyadh City (RCRC), the Riyadh Urban Observatory (RUO) monitors and evaluates the city's development trends and rapid growth.

RUO aims to create sustainable urban monitoring systems, support sustainable development planning, link indicator findings to policies, build local capabilities, and promote partnerships among policy-implementing sectors. It identifies urban priorities and issues, conducts meetings and workshops with sustainable development partners, and develops specialized studies to address significant issues comprehensively. These efforts align with the strategic plans of all partners, ensuring the development of appropriate solutions.

In 2021, the Riyadh Urban Observatory, in collaboration with the United Nations Development Programme (UNDP), organized several workshops on Sustainable Development. These workshops, attended by 50 city stakeholders, aimed to enhance capacities and monitoring for the Sustainable Development Goals (SDGs) in Riyadh. The themes included evidence-based monitoring and evaluation for sustainable urban development, as well as specialized training on Geographic Information System (GIS) applications for the SDGs.



Riyadh Urban Observatory



Develop sustainable urban monitoring systems that support comprehensive planning across Riyadh.

Achieve satisfactory implementation of the U4SSC KPIs for Smart Sustainable Cities, awarded to Riyadh by the United Nations' U4SSC.

Facilitate and promote partnerships among various public and private entities operating in the city.



Maintain continuous collaboration with the United Nations Development Programme (UNDP) since 2009



2013

30

Basic indicators monitored

2016

116

Urban indicators monitored aligned with key Riyadh programs

2024

400

Data indicators for Riyadh, standardized and utilized to track the SDGs

2019

180

Urban indicators aligned with Riyadh City Focal Areas

Riyadh Urban Observatory

National

Urban Observatory Committee

Riyadh Region Police
General Authority for Statistics
Royal Commission for Riyadh City
communications and Information Technology Commission
Ministry of Justice
National Information Center
Department of Education in Riyadh
Health Affairs in Riyadh
Ministry of Economy and Planning
National Water Company
Saudi Electricity Company
Riyadh Amana
Ministry of Municipal and Rural Affairs
Riyadh Chamber of Commerce
Urban Observatory of Riyadh



International

Key
Partners
& Vendors

RUO

Partners



U20 – RCRC efforts in Urban20

The Urban 20 (U20) is a city diplomacy initiative that brings together cities from G20 member states, along with observer cities from non-G20 states, to discuss and formulate a unified stance on critical urban issues such as climate action, social inclusion and integration, and sustainable economic growth. These meetings and discussions culminate in a final communique through which the U20 presents recommendations to the G20 Heads of Government.

The objective of the U20 is to elevate urban issues to the forefront of the G20 agenda. It serves as a unique platform for ambitious local government leaders to advocate for global climate action

and sustainable development to their national leaders. This objective is achieved by delivering a final Communique of recommendations to the G20 President and Heads of State.



The Verticals: three U20 thematic areas



Circular, Carbon-neutral Economy

Meeting the global climate targets requires transforming our urban energy systems to be more efficient and based on clean renewable energy sources, while also shifting from a linear material economy to a circular model that reduces, reuses, recovers and recycles scarce and carbon intensive resources



Inclusive, Prosperous Communities

Cities must ensure equal access to opportunities and services for all residents, fostering an environment where everyone can thrive. This involves preparing citizens for the future of work, bridging the digital divide, promoting cultural inclusivity and integration, and providing safe public spaces and infrastructure.



Nature-based Urban Solutions

Nature-based solutions must be integrated into urban planning and development to create a healthy urban environment that offers productive ecosystem services. These services include the provision of clean air and freshwater, food and nutrition, recreation and tourism opportunities, livelihoods for local populations, and resilience to the impacts of climate change.

The Horizontals: three cross-cutting dimensions



Implementing the Sustainable Development Goals

To effectively promote local sustainability efforts, cities must harness the political will and legitimacy provided by the globally agreed Sustainable Development Goals (SDGs). These goals should be localized and adapted to each city's unique context with specific, actionable targets. This requires implementing effective governance processes, conducting Voluntary Local Reviews, integration of disconnected systems.



Urban Innovation and Technology

Today's cities are beta versions of tomorrow's cities. Innovation must be harnessed, entrepreneurs must be nurtured, transformation must be enabled in the city, new economics and lifestyles must be supported, and technology and infrastructure must be integrated with aspirations of social, economic, and environmental sustainability.



Sustainable Urban Finance and Investment

Social, economic, and environmental aspirations of cities must be made financially feasible by providing them with the right tools. In order to unlock finance for sustainable urban development, new business models are needed for profitable investment cases, new institutions and mechanisms are needed to reduce administrative and financing barriers, and best practice financing instruments must be mainstreamed.

The Special Working Group on COVID-19

In response to the covid-19 outbreak, the U20 chaired by Riyadh created the Special Working Group on COVID-19 that aimed to develop financial recovery recommendations for cities to G20 national leaders.

As part of the Special Working Group, which was led by Riyadh and co-chaired by Buenos Aires and Rome, 10 U20 cities and 7 knowledge partners shared 32 case studies from cities, filled out 21 surveys representing more than 75 million citizens, and developed a report that focused on mechanisms to facilitate easy access to financing for recovery.



The U20 Communiqué Thematic Pillars and Taskforces

U20 Communiqué Structure speaks to the G20 priorities

Special Working Group on COVID-19	Partner by investing in a green and just post COVID-19 recovery	8
Nature-based Urban Safeguard our planet through Solutions Taskforce	Partner by investing in a green and just post COVID-19 recovery	5
Circular, Carbon-Neutral Economy Taskforce	Shape New Frontiers for development, by accelerating the transition to a circular, green economy	5
Inclusive Prosperous Communities Taskforce	Empower People to deliver a more equitable future	9 recommendations

39
Cities



Riyadh Urban Observatory



- Working together with all levels of government, civil society, the private sector, and research, think tanks, and academia to build a stronger environment for COVID-19 recovery Green and just recovery Safeguard the planet by collaborating on a national-local level Shape the future of development by accelerating the transition to a circular economy.
- Incorporate all urban citizens, residents, migrants, and especially vulnerable communities into a more equitable and inclusive future, ensuring their safety and wellbeing Implementing the Sustainable Development Goals (SDGs) Complete communities

U20 Communiqué

Shared with the G20 Sherpa of Saudi Arabia, Endorsed by the leaders of 39 cities Impacting 155 million people

2.8.4 Achievements and Improvement Areas

01

To develop standardized statistical methods for reporting Riyadh City's Economic Productivity.

02

Using unified assumptions, measure the impact of initiatives on a city scale by collaborating with the non-profit sector.

03

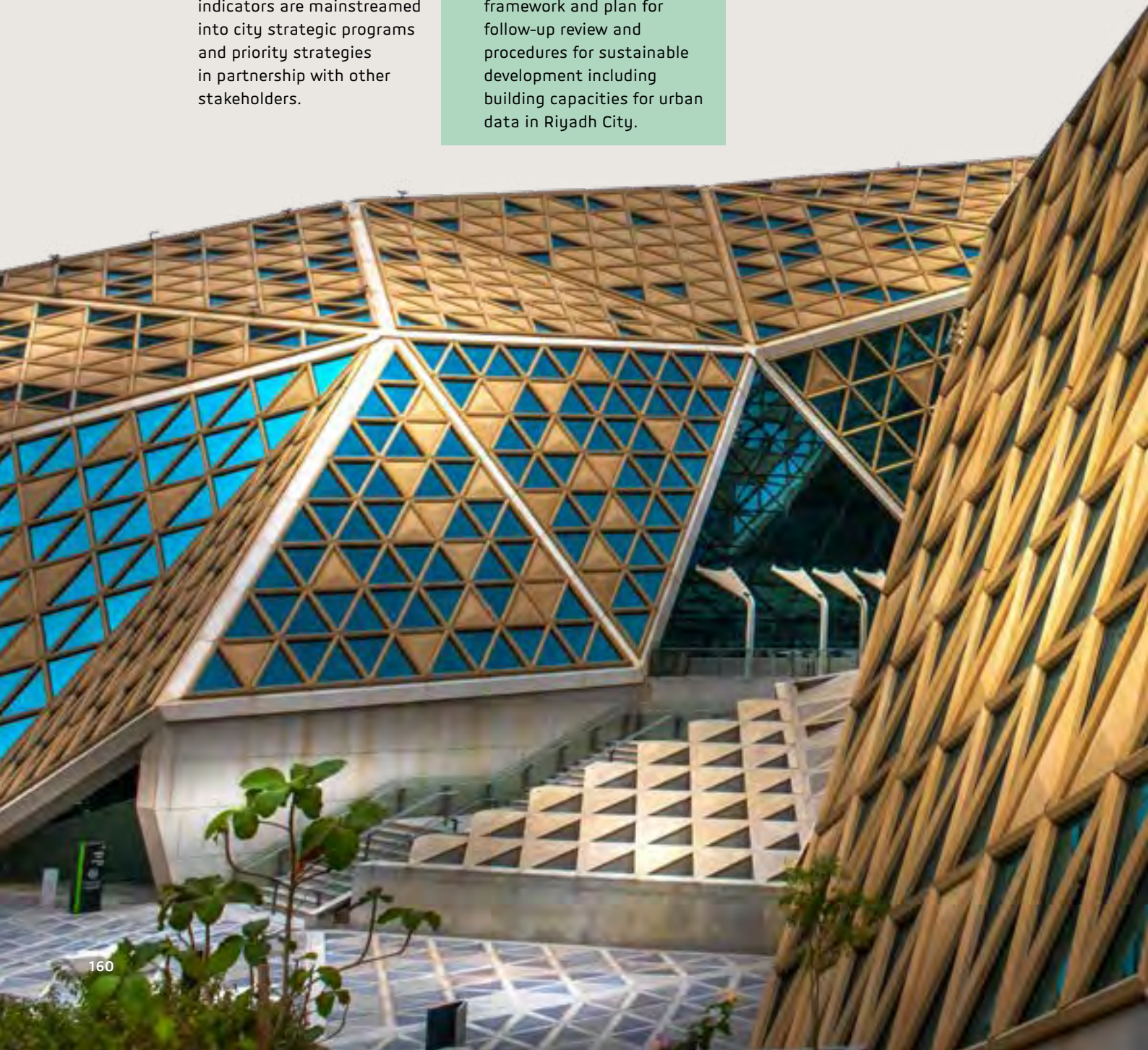
Using innovative technologies, develop disaggregated data on nationality, income, disability, and gender in a cost-effective manner to be updated constantly

04

Ensure that SDG17 targets indicators are mainstreamed into city strategic programs and priority strategies in partnership with other stakeholders.

05

Put in place a governance framework and plan for follow-up review and procedures for sustainable development including building capacities for urban data in Riyadh City.



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Chapter Three



3.1 SDG Summary Sheets

Global themes		Riyadh themes	
	SDG3: Good Health & Well-being - maternal health, infant mortality, disease prevention, mental health, wellbeing, road safety, substance abuse and addiction prevention and treatment, access to healthcare, pollution reduction, access to medication and vaccines, long term care and aging, physical activity, noise pollution, workplace health and safety, harm reduction, health equity, pandemic response	Livability (healthcare) : The vision of Riyadh plans to provide the health needs of the population in balance with population growth and focus on physical and mental care and become a flagship research hub and number one provider of choice for international patients hence driving economic impact and diversification	
	SDG 4: Quality Education - access to education, early childhood and primary education, postsecondary education and job training, youth employment, literacy and numeracy, equity in education, knowledge of sustainable development, accessibility in education, teacher training and livelihoods, lifelong learning, traditional ecological knowledge, Indigenous languages, education access people with disabilities neurodiverse individuals	Livability (Education) : Become a center of learning and intellectual pursuit, by establishing an effective, sustainable and accessible education system of high quality output, which is fully responsive to labor market demand	
	SDG 5: Gender Equality - women's rights, domestic violence and violence against women, unpaid/domestic work, women in leadership, gender pay gap, gender-based policies for employment, gender rights, women entrepreneurship, reproductive rights, LGBT2QIA + issues, period poverty, sex workers rights/livelihoods	People (Talent & demographics) : Within the national path of the Kingdom's Vision 2030, Riyadh aims to enhance investment in human capital, increase women's participation in the labor market, and empower them for leadership roles within a strategic plan for effective participation, overcoming challenges, and monitoring systems on a regular basis to measure impact.	
	SDG 6: Clean Water & Sanitation - clean drinking water, access to sanitation facilities, wastewater treatment, water scarcity, water efficiency, protection and restoration of aquatic ecosystems, watershed protection, water pollution	Urban development (Infrastructure & Utilities) : Transform Riyadh into a global mega city with best-in-class infrastructure and services for all residents	
	SDG 7: Affordable & Clean Energy - clean/renewable energy, universal energy access, energy efficiency, energy policy, energy affordability, energy infrastructure and technology, energy conservation, fossil fuel divestment, energy efficiency, passive homes/buildings, community energy infrastructure, energy retrofits/renovations	Environment (Environmental & Sustainability) : Riyadh's sustainability strategy aims to sustainability in five sectors: renewable energy and climate change, air quality, water management, waste management, biodiversity and natural areas.	
	SDG 9: Industry, Innovation & Infrastructure - inclusive road and transportation infrastructure, inclusive industrialization, access to financing and credit, support for small enterprises, infrastructure retrofits, research and new technologies, social entrepreneurship, regional innovation, access to technology, internet access and communications technology	Economic development : Contribute to the National Industrial Strategy by becoming the home of high value-add sectors and R&D to catalyze Riyadh's growth and export potential. People (Talent & demographics) : Riyadh, a talent attraction pole where a high-skilled, productive and diverse workforce will boost economic development, spread social & intellectual prosperity and unleash the potential of Human Capital.	
	SDG 11: Sustainable Cities and Communities - transportation access, road safety, protection of cultural and natural heritage, affordable housing, sustainable urban and regional planning, air quality, solid waste management, inclusive public spaces, urban containment and growth, resource efficiency and sharing, inclusion, community empowerment, active transportation, public transportation, urban design, climate resilience, urban-rural linkages	Urban development : Establish Riyadh as a City of the Future through strategic planned growth People (Lifestyle) : Creating an innovative and impactful social development ecosystem that will allow Riyadh to become a human centric city where no one is left behind, empowering its citizens to unlock their full potential, address social needs deepen their sense of pride	
	SDG 17: Partnerships for the Goals - tax reform, international cooperation, trade, access to technology, data collection and sharing, cross-sector collaboration, collective action, resources & data sharing, local partnerships	Governance : To establish a robust, coordinated, and efficient governance for the city that actively drives Riyadh's progress and deliver the needs of its residents and businesses to succeed	

3.2 Achievement Summary

- Riyadh represents a large established economic base, representing 47% of KSA's non-oil, non-government GDP (as of 2022).
- Center for government and business in KSA with key service sectors.
- High personal safety with very low crime levels (99 violent crimes per 100k residents)
- High social capital due to social connections and identity with history/culture
- Main medical tourism destination in KSA; # of doctors & hospital beds per capita comparable to top cities.
- Best infrastructure in the country with strong road, power and internet connectivity (99.9% of people have access to approved power service, 99% of Riyadh has at least 3G coverage)
- Available land for economic uses and housing (~1,750 sq km vacant land in urban boundary)
- Vision of Riyadh in total contained over 300 policies and actions addressed at bringing positive change to major aspects of Riyadh's development, across its economy, society, environment, urban structure and efficiency, transport system, land use, and in many other aspects of the city's future development.
- High density development encouraged along corridors intended to support the development of public transport. The Structure Plan in identified high-density corridors in key strategic locations, with the intention of creating public transport links along these 'spines, and metropolitan sub-centers linked to each 'spine. New transit-oriented development (TOD) land-use policies focused on the METRO rail stations and rail-bus interchanges will supplement or replace the metropolitan sub-centers
- Air quality management for the metropolitan region has been introduced, with 17 air quality measurement stations introduced across the city, involving 24-hour monitoring
- Riyadh is perceived strongly on providing economic opportunities against an affordable cost of living
- Strong commitment to invest in sustainability initiatives, with budget of 145-180B SAR already announced.
- Riyadh looking to address biodiversity loss and begin their nature-positive and commit to act to the benefit of nature and leave it in a better state than it was before, both within and beyond their own city boundaries this commitment was translated into Riyadh's sustainability strategy
- The Central Riyadh Regeneration (CRR) project is a transformative initiative aimed at revitalizing the heart of the Saudi Capital, Riyadh. A key component of this endeavor is the Central Riyadh Socioeconomic Strategy. Through this collaborative effort, the project seeks to foster inclusive communities and create dynamic, thriving urban spaces in Central Riyadh. The CRR programme aims to enhance the urban environment in the region and improve the quality of life for all. It targets 20 districts with an aim to co-create a vibrant city center, a hub for knowledge, rich in heritage and culture.

3.3 Policy Recommendations for full implementation of SDG 2030

SDG governance

- Establish a governance platform to track, monitor and report on SDG on an annual basis through a digital dashboard shared by City Stakeholders hosted in Riyadh Urban Observatory.
- Establish policy coherence working groups for each SDG to advise on alignment between key urban policies and strategies with Agenda 2030.
- Establish an annual follow-up and review systematic processes to inform key decision makers on progress on the full implementation of the 2030 SDGs.

Data availability and quality

- Develop Meta guides for Riyadh City Indicators in order to align with reporting standards and enhance comparability over time.
- Collaborate with the Private Sector in order to capture their impact and evaluate their contribution to the full implementation of Agenda 2030 in Riyadh city and enhance the quality of the SDG impact reporting.
- Partner with the non-profit sector to capture data on the contribution of its programs and initiatives to specific SDGs and establish formalized reporting mechanisms to monitor progress
- Work with Universities and educational vocational institutions to enhance the quality of data on youth empowerment and Education sector Agenda 2030 targets.

Implementation

- Develop a baseline on migration in Riyadh City and develop forecasts in order to integrate policies related to employment, housing, infrastructure, education, and health to improve city livability.
- Develop Riyadh Sustainable Urban Development program that will enhance Riyadh City's standing in regard to UN SDGs through targeted capacity-building programs, Specific Projects, and Policy recommendations.

Enabling factors

- Establish a digital dashboard in order to monitor and report on SDG progress that will be used as a tool for Evidence-based Urban Development Policies.
- Develop the capabilities of statistical, data, and GIS units within Riyadh City Stakeholders for efficient reporting, monitoring, and evaluation of the full implementation of SDG 2030.
- Dedicate an annual percentage of Riyadh City Budget through RCRC for Sustainable Urban Development Program in partnership with local city stakeholders.



3.4 Riyadh Lookout for full implementation of SDG by 2030

In anticipation of 2030, Riyadh City will capitalize on the progress made in health, education, infrastructure, Urban Development, and partnerships and expand in these areas by initiating specific strategies to upgrade the health sector, expand the use of renewable energy, and increase the percentage of use of treated water.

Riyadh City is planning to issue the 2025 Local Voluntary Review through Riyadh Urban Observatory and in partnership with the city stakeholders in the public, private, and non-profit sectors with the aim of expanding the review to cover the 17 Sustainable Development Goals building on a sound governance framework and institutional set-up for systematic data collection and analysis.







RIYADH CITY 2024





الهيئة الملكية لمدينة الرياض
ROYAL COMMISSION FOR RIYADH CITY