CAMPUS MASTER PLAN 2050

Campus Sustainability Direction

Conclusion, objectives, vision and SDG alignment from the Campus Master Plan 2050

Projects Department | 2025–2026

KFUPM

A benchmark sustainable campus

The Master Plan establishes a coherent direction for a resilient, efficient and people-centred KFUPM campus.

KFUPM has an opportunity to position itself as a benchmark sustainable campus by connecting global sustainability frameworks, Saudi priorities, technical standards and measurable campus performance.

- Align campus development with international best practice and Saudi Vision 2030
- Integrate measurable targets for energy, water, waste, biodiversity and carbon
- Use the campus as a platform for education, research, innovation and partnerships

RESILIENT
RESOURCE-EFFICIENT
LOW-CARBON
PEOPLE-CENTRED

A long-term campus ambition

The vision connects the physical campus with institutional performance, climate action and societal impact.

Meet current needs without compromising the ability of future generations to thrive.

Sustainable water

Efficiency, reuse, pollution prevention and supply resilience

Clean energy

Monitoring, efficiency, renewable energy and decarbonization

Responsible resources

Waste reduction, lifecycle planning and circular use of assets

Resilient communities

Safety, accessibility, well-being and climate adaptation

Research and innovation

A campus that demonstrates and advances sustainability practice

STRATEGIC OBJECTIVES

From ambition to measurable performance

The roadmap translates the sustainability vision into practical priorities for campus planning, design and operations.

Water	Reduce demand, improve network efficiency, expand reuse and protect water quality
Energy	Improve building performance, manage demand and transition toward cleaner energy
Climate	Reduce emissions, strengthen resilience and prepare for a fossil-fuel-free campus
Built environment	Apply efficient design, retrofit existing assets and improve indoor conditions
Landscape	Protect biodiversity, conserve natural habitats and use water-conscious planting
Governance	Coordinate stakeholders, monitor performance and strengthen accountability

CLIMATE ACTION ROADMAP

A defined path toward decarbonization

The Master Plan links near-term efficiency measures with long-term renewable-energy and carbon-neutrality ambitions.

2030	2040	2050	2060
50% renewable electricity Reduce carbon emissions	100% renewable energy use 75% GHG reduction	Fossil-fuel-free campus Renewable electricity and low-carbon transport	Carbon neutrality Direct and indirect emissions

The targets provide a clear basis for project-level decisions, performance indicators and annual sustainability reporting.

SDG ALIGNMENT

The campus contributes across all 14 SDGs

The strongest links for campus development are concentrated in health, education, inclusion, resources, infrastructure, climate and partnerships.

03	Health and well-being	04	Quality education	05	Gender equality	06	Clean water
07	Clean energy	08	Decent work	09	Innovation and infrastructure	10	Reduced inequalities
11	Sustainable communities	12	Responsible consumption	13	Climate action	15	Life on land
16	Strong institutions	17	Partnerships				

SDG alignment turns individual projects into a unified campus sustainability story.

Projects are the delivery mechanism

The sustainability vision becomes credible when it is visible in the design, renovation and operation of campus assets.

People	Resources	Innovation	Resilience
Student and faculty housing Inclusive facilities Health, safety and comfort	Efficient HVAC and lighting Water reuse and monitoring Responsible asset renewal	Research-ready buildings Smart systems and BMS Digital infrastructure	Reliable utilities Climate-ready public realm Strong governance and partnerships

This framework provides the narrative bridge between KFUPM's masterplan aspirations and the campus projects delivered by the Projects Department.

KFUPM sustainability direction

A campus that demonstrates sustainable development in practice

The Master Plan provides the direction. Campus projects provide the evidence. Performance monitoring will demonstrate progress.

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