HOW TO BECOME A SUSTAINABLE SMART CITY: THE CASE OF AL QUASSIM ECO-NEIGHBORHOOD, SAUDI ARABIA

AL-JAWHARA AL-MUHANNA, AIDA NAYER
SAUDI 2030 VISION

Reinforce the abilities of the economy

The use of resources other than oil

Global investment center

Transforming into a global hub connecting three continents

THEMES OF THE VISION

- A vibrant society

The believe of the vibrant society, and the implementation of the Islamic principle, to be proud of their identity and cultural heritage, to enjoy a good beautiful life, and to be supported by an empowering social and health care system.
A thriving economy

Provides opportunities for all by building an education system to match the market needs. The development of the investment tools to reveal the promising economic sectors.
An ambitious nation

The theme is built on an effective, transparent, accountable, enabling and high-performing government. The nation is ambitious to achieve their goal. The government support the citizens with private sector and non-profit sector to take their responsibilities in facing challenges.
AL QASSIM REGION

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In our case to be able to have a smart city we have to work with society more than other techniques
PRINCIPLES OF SOCIAL AND CULTURAL SUSTAINABILITY IN SAUDI ARABIA

- Respond to social needs
- Respond to cultural values
- Quality of life
- Adaptability
- Safety
- Security
- Participation
- Accessibility and
- Privacy
URBAN SETTLEMENTS AND DEMOGRAPHIC CHARACTERISTICS

The population in the seven main cities of Qassim

Population by age

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NATURAL RESOURCES IN AL-QUASSIM

- Groundwater
- Agricultural land
- Minerals

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Social and cultural sustainability of Saudi traditional houses

- The physical characteristics of the region.
- All societies in the world has a unique standard to differentiate it from the rest of the world.
- Social and cultural sustainability has to meet the culture needs.

Design Considerations

- Balance public and private spaces
- Meet the need of the citizens
- Monitor and establish sustainable technologies and methods
- Reduce housing running cost
- Natural growing food on site.
ENVIRONMENTAL ANALYSIS FOR BURAIDAH CITY

Average Rainfall (mm) Graph for Buraidah

Average Temperature (°C) Graph for Buraidah

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KING ABDULLAH PETROLEUM STUDIES AND RESEARCH CENTER RESIDENTIAL COMMUNITY (KAPSARC)

- **Location**: Riyadh, Saudi Arabia
- **Type**: residential community
- **Site area**: 30 hectares

AL-Jawhara AL-Muhanna, Aida Nayer
THANK YOU

Architecture Student, AL-Jawhara AL-Muhanna, Effat University, Jeddah, Saudi Arabia
aljohara.almuhanna@gmail.com

Assistant Professor, Architecture department, Effat University, Jeddah, Saudi Arabia
anayer@effatuniversity.edu.sa