

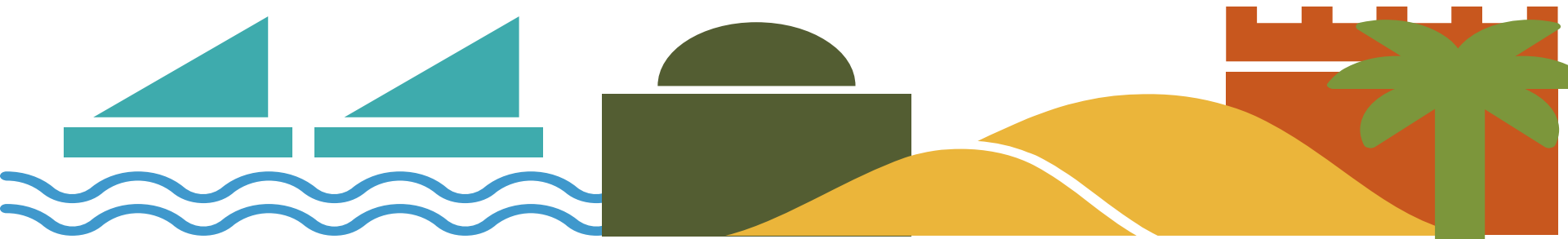
Abu Dhabi Sustainable Public Lighting Strategy

NOOR ABU DHABI PROJECT

Smart LED Lighting Retrofit

in Partnership with the Private Sector

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Abu Dhabi City Municipality



A Breakthrough Initiative

THE FIRST

PUBLIC PRIVATE PARTNERSHIP MODEL
IN THE MUNICIPAL INFRASTRUCTURE ASSETS

THE FIRST

SUSTAINABLE & SMART ROAD LIGHTING
RETROFIT PROJECT
IN THE UAE AND MENA REGION

MOREOVER

CITY-WIDE WIRELESS COMMUNICATION
NETWORK WITH A CENTRAL CONTROL FOR
FUTURE SMART CITY APPLICATIONS

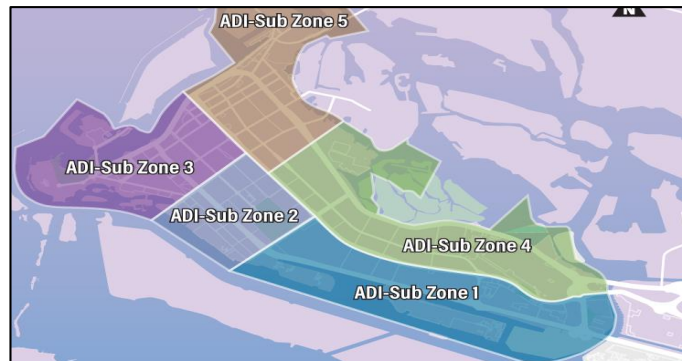


Abu Dhabi Satellite view at Night

Noor AD Project Location



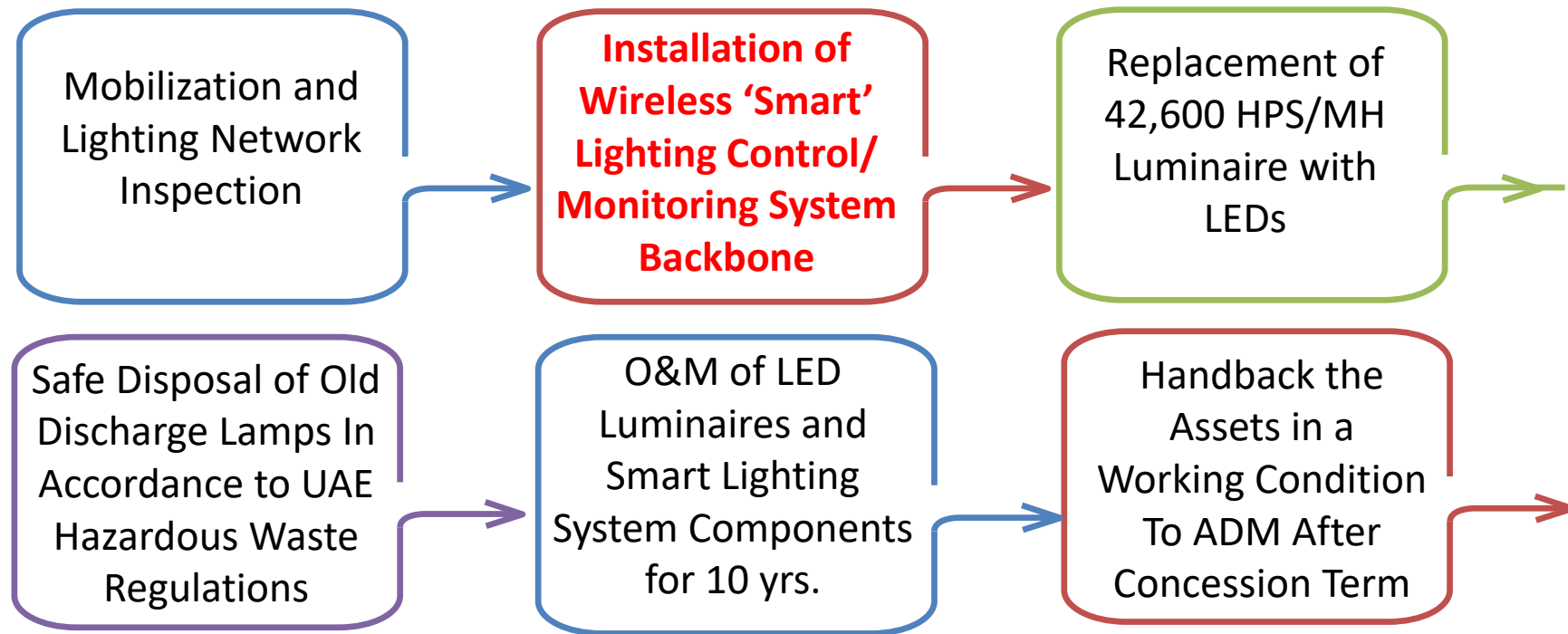
United Arab Emirates (UAE)



Abu Dhabi Island

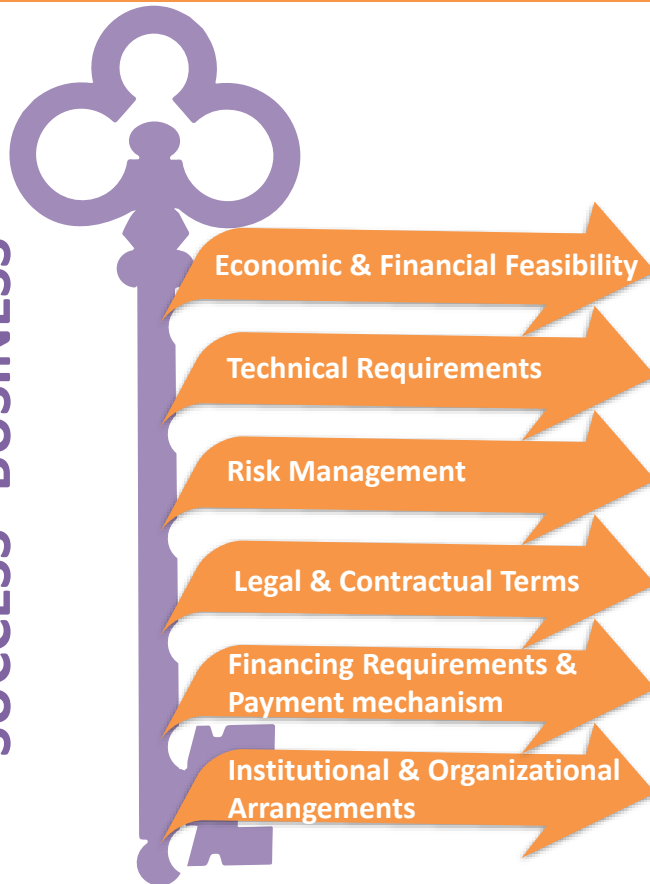


PPP Project Scope of Works



Preparation of Project

SUCCESS BUSINESS



Abu Dhabi Sustainable Public Lighting Strategy

The Lighting Strategy Addresses:

- ✓ Lighting intensity standards closer to the international best practices
- ✓ Lighting quality design standards
- ✓ Power-saving lighting technologies
- ✓ Reduction of equivalent operation hours (including Dimming)
- ✓ Economic Feasibility analysis up to 2030 horizon Year
- ✓ Environmental, Human and Social aspects

ISSUING REGULATIONS (STANDARDS & SPECIFICATIONS)



IMMEDIATE IMPLEMENTATION IN ALL NEW PROJECTS

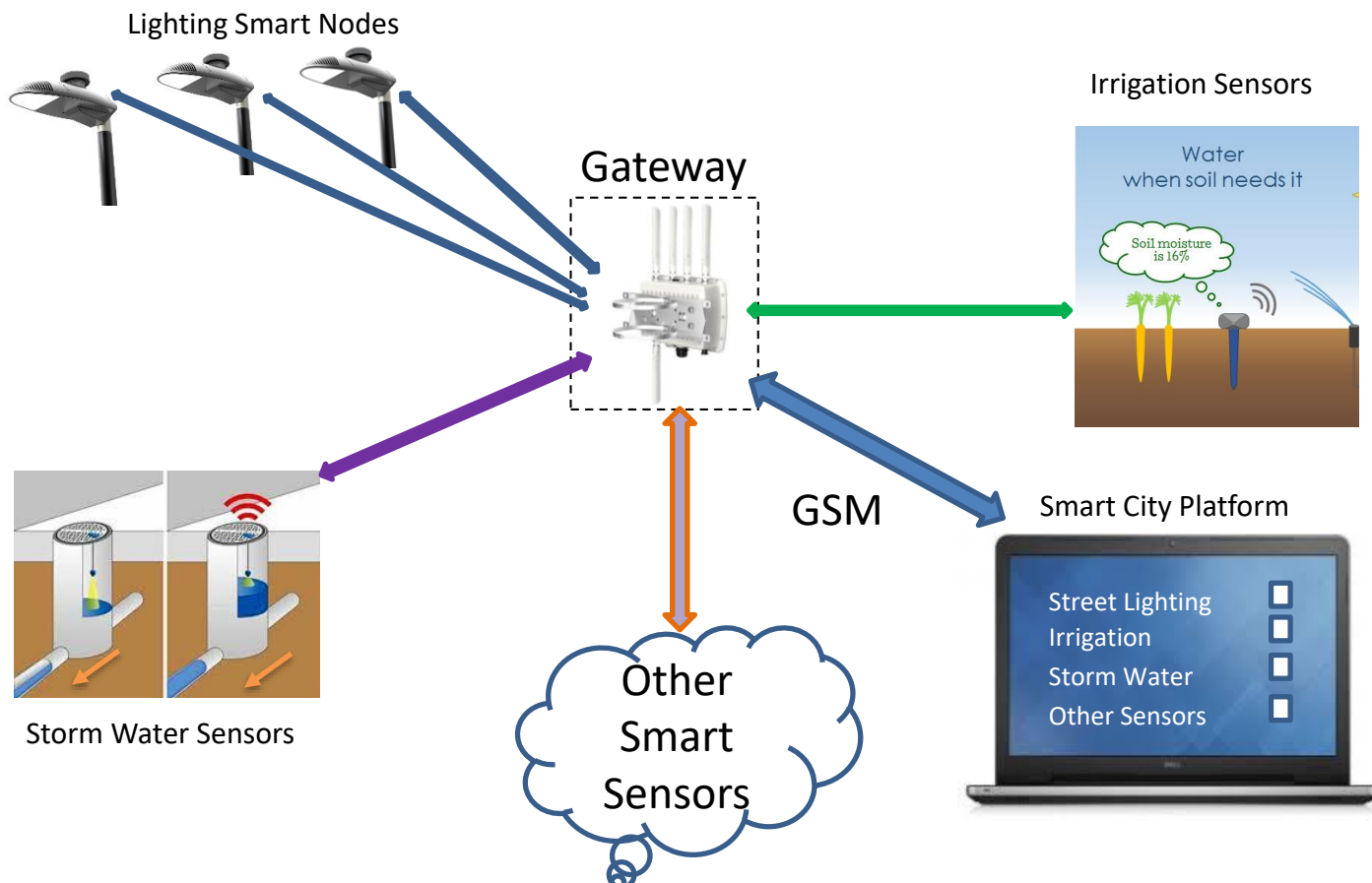


RETROFIT PROGRAM FOR EXISTING LIGHTING



Noor
Abu
Dhabi

Smart City Concept For Municipal Infrastructure



Public Private Partnership (PPP) Approach

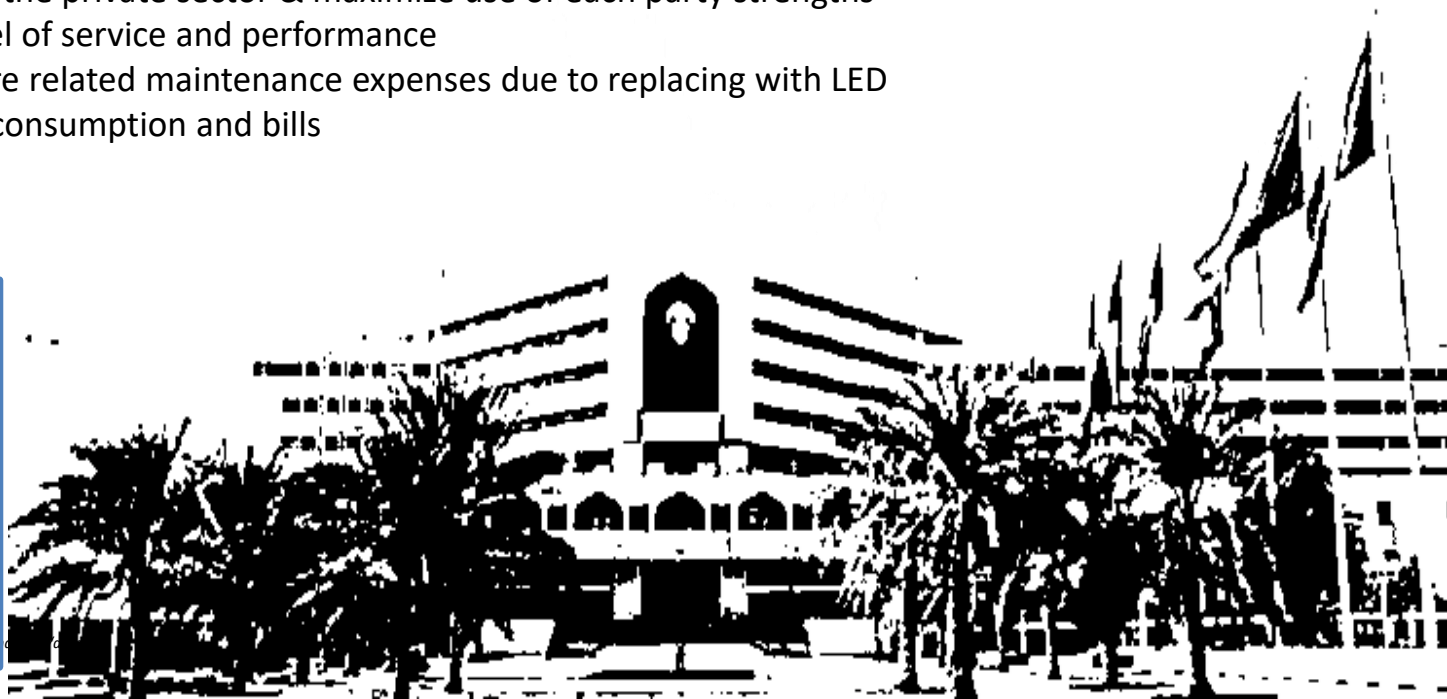
ADM aims to achieve the following:

- Retrofit the existing lighting to the new standards and power saving technology
- Shift the upfront cost of the lighting system replacement to the private sector partners
- Accelerate project delivery
- Share risks with the private sector & maximize use of each party strengths
- Ensure high level of service and performance
- Reduce luminaire related maintenance expenses due to replacing with LED
- Reduce energy consumption and bills



Our Mission

Support the sustainable growth of the Emirate while managing urban development and providing the communities with the higher level of municipal services to ensure the constant leverage of their lifestyle

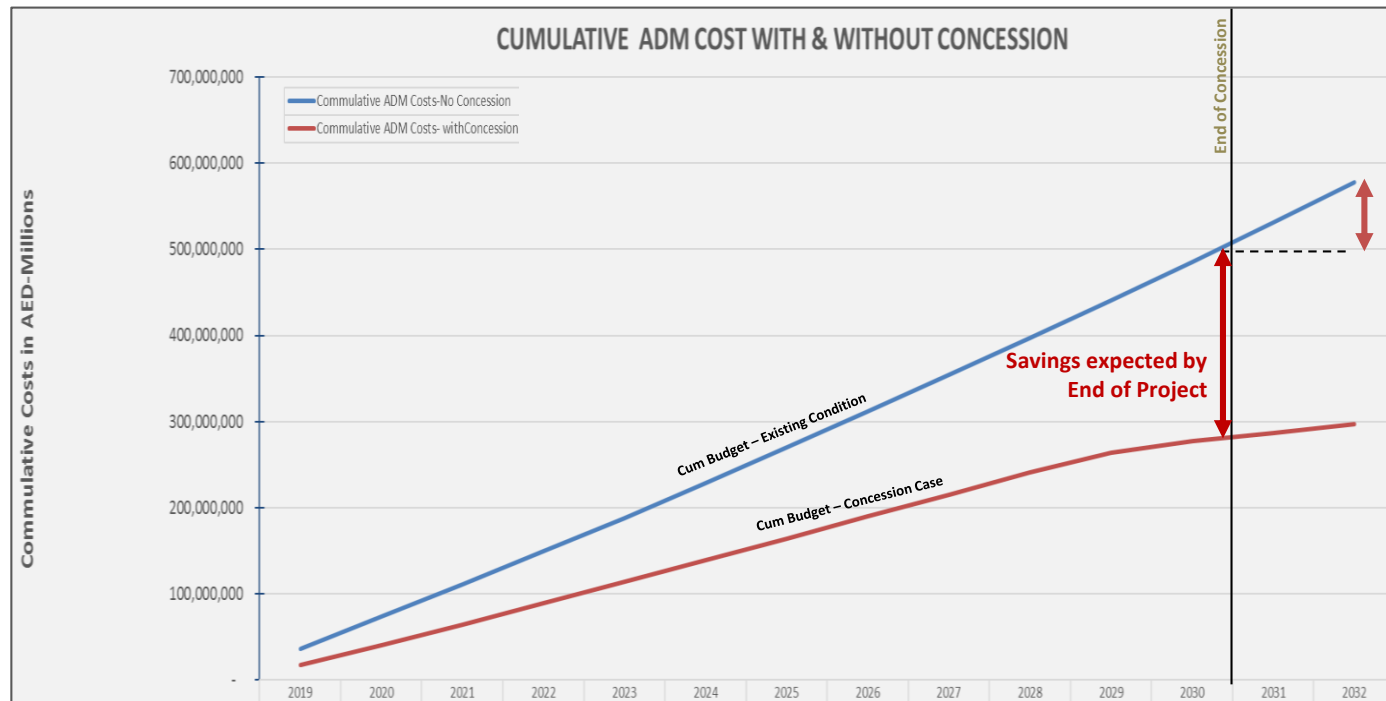


PPP vs. Traditional

Procurement & Management Practices

| | Current On-Going Practices | Public Private Partnership |
|---------------------------------|---|--|
| Source of Funding | Government Funding | Capital and Operational Funding by Service Provider (i.e. concessionaire) |
| Procurement Methodology | Based on a quoting from the service providers (Competition) | Based on comparison with existing (baseline) case using a financial Model |
| Offers Evaluation | Selecting best proposed offer (based mainly on price) | Based on a Power Savings & Pricing |
| Project Control Measures | Controlled by Work Orders Duration against Actual Completion Date | Controlled by Key Performance Indicators KPIs |
| Responsible Party | Assets managed by ADM | Assets managed by Service Provider |
| Payment Mechanism | Payments depends on achieved milestones (accepted executed works) | Payments depends on achieving the agreed Savings and Service Availability KPIs |

Anticipated Savings



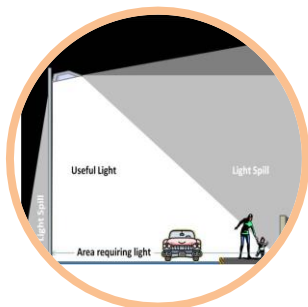
SAVINGS ARE GROWING OVERTIME AND EXCEEDS 200 MILLION DIRHAM BY END OF CONCESSION TERM

Expected Outcomes



Environment

- Reduce CO₂ emissions by 75%
- Reduce Energy Consumption by 75 %
- Saving more Energy by Dimming



Public Interest

- Prevent Lighting Pollution by reducing Lighting level by 66%
- Service Reliability
- Less Traffic Interruption from maintenance works
- Quick Response on required maintenance



ADM/Government

- Effectiveness
- Efficiency
- Community Satisfaction
- Encourage Private Sector to invest in Public Services



Street Lighting Industry

- Increase Quality
- Reduce Costs
- Efficient Operation & Control
- Market Motivation

THANK YOU