Challenge Statement

Seeking New Energy Efficiency Solutions for Buildings

• Can you share images and information about the electrical distribution box (DB Box) you have at the various buildings?

Reply:

This can be provided once an NDA is signed

• Is there any technical information you can share on the district cooling plant (DCP) and the Mechanical, Electrical & Plumbing (MEP) within the building?

Reply:

This can be provided once an NDA is signed

What is the existing DCP efficiency at Ruwais City?

Reply:

This can be provided once an NDA is signed

 For the Ruwais city project, scope for building energy efficiency, is there any expected building type for the energy efficient solution to be implentmented (commercial or residential?

Reply:

Newly constructed or renovate existing building?) This would include existing buildings, building type will be based on the proposals.

• What would be the benchmark standard that we should consider for working on the energy efficiency solutions?

Reply:

Rather than a standard, the goal is to reduce energy consumption as much as possible. The most promising proposals will be selected. The baseline will be the buildings' current energy consumption rates, which are measured.

Challenge Statement

Seeking Real-time Data Collection, Analysis and Notification Solutions for Emergency Response and Maintenance Systems

Can you share information of what are the current real-time collection tools at Ruwais City?
 Reply:

Video cameras

Please share what the existing notification system use for Ruwais City is?
 Reply:

Ruwais mobile app that allows the sending of notifications. Maintenance requests. Listings of shops, key attractions, restaurants, The types of notifications are changeable. SMS notifications are also utilized.

• What's the current realtime system that are currently in operations? and how open the existing solutions provider(s) are to open and share those data with us?

Reply:

This can be discussed once an NDA is signed. The app owners are open to collaboration, depending on the request.

• Could you please share what are the existing infrastructure for data collection & response mechanisms? Understanding these can help us to propose better integrations.

Reply:

Besides the information we already listed, we cannot provide more information until an NDA is signed.

- Can I seek clarification on the following:
 - 1) What are some of the emergency situations in Ruwais City's recent history?
 Reply:

This can be shared once an NDA is signed

2) What other forms of data are currently available besides a video feed?
 Reply:

This can be shared once an NDA is signed

3) How many cameras are set up in the city and what are the cameras capturing?
 (For example, vehicles on the road, buildings, etc)

Reply:

It's a typical urban camera system common throughout the world, in terms of its objectives and scope. Further information can be shared once an NDA is signed.

4) Could you provide some specifications on the meaning of "optimize workforce demand"? Are public services currently overstaffed?

Reply:

No. Smart systems offer an opportunity to reduce the quantity of active workhours needed to operate a system. This should be one of the project objectives.

 Are there any IoT sensors already deployed within the community which we can integrate with?

Reply:

This can be shared once an NDA is signed

 What is current data volume, variety, size of existing data collected from ADNOC's existing sensors?

Reply:

This can be shared once an NDA is signed

Challenge Statement

Seeking New Energy Efficiency and Smart City Solutions for Street Lighting

• Can you share information (images and electrical specifications) about the streetlamp you have at Ruwais City?

Reply:

This can be provided once an NDA is signed

• Regarding to street lighting, can we get the as-built electrical drawings for street lighting and the data sheet of used lighting fixtures from ADNOC?

Reply:

This can be shared once an NDA is signed

Will DC architectures be considered for Street Lighting?

Reply:

This would require further discussion, in terms of cost, adaptability,etc

 An IoT Platform is expected to be used, or the scope is focused on devices in Lighting Infrastructure?

Reply: This is open to applicants proposals

 What are the brands and specific models of the existing street lamps? What type of connectors are use? NEMA?

Reply:

This can be shared once an NDA is signed

What is the telecom infrastructure? 3G or 4G what is the approved frequency in Abu Dhabi?
 Reply:

This can be shared once an NDA is signed

 Will ADNOC help to secure the telco licenses to use wireless communication frequency? For example, if LoRaWAN based sensor network are proposed will ADNOC help apply for the relevant licenses?

Reply:

This would need to be discussed in more detail once the proposal is selected.

For the sensors, when the information is collected and if there is a need to take action what
is the acceptable processing delay? This has an impact on the sensor communication
requirements such as update rates, etc which will affect the overall design of the proposal.
Reply:

This is open to proposals

 Would ADNOC be open to conduct trials using completely new lamppost equipped with sensors? This because retrofitting existing lampposts have many technical complications?
 Reply:

Yes, although the cost will likely be the responsibility of the applicant, for the pilot test.