***Sustainable Energy Authority (SEA) is tapping into the future with AI solution for Crowd source energy efficiency to reduce EWA bill powered by AWS***

SEA launches the first energy monitoring system consisting of a mobile application tailored towards helping the public to reduce their EWA bills and a Dashboard helping decision makers to have a nationwide view of energy consumption

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Residents & Bahraini citizens are looking to minimize the monthly bills related to their energy consumption. There is a pressing need for an effective solution that provides citizens/residents with best practices for using energy efficiently. Furthermore, SEA needs to have visibility on how the current energy consumption is getting closer to national targets of energy efficiency. There is a lack of information for Bahraini citizens/residents about best practices for minimizing their energy consumption. Furthermore, SEA does not have information about how each citizen/resident is consuming the energy and lacks the tools to advise citizens/residents,

In response, the Cloud Innovation Centre at University of Bahrain that is powered by Amazon Web Services (AWS), and in collaboration with the SEA designed a mobile application with several functionalities around energy efficiency and monthly bill monitoring. Moreover, a dashboard for SEA managers was created to monitor energy consumption in an interactive and organized way.

A mobile application is designed to collect the user’s information needed to provide some advice for increasing energy efficiency. This information is collected by scanning the bill and visualized on a dashboard for monitoring the trends of the bill on a monthly basis. Moreover, the mobile app users will be able to compare their electricity and water consumption to their neighbors of the same household size. What’s more, an Air Conditioner (AC) calculator is implemented to calculate the potential savings of replacing an old AC with an EWA certified AC. The app also includes a chatbot that is programmed to provide users with additional support and answer questions. In addition to the mobile application, a dashboard was implemented for SEA managers to have a country wide view of the data provided by the users. The data is illustrated on different charts that capture comparisons of water and electricity consumption based on governorate, subsidy and change over past months. Furthermore, algorithms to forecast the energy consumption and predict how far is the current energy consumption is from national targets.

Mike Bainbridge, AWS Global CIC leader said "I am very proud with the level of engagement and knowledge and skills this prototype brought to the country and proud of working with SEA and the Bahraini intelligent students at our CICs”

The public will have a mobile application installed on their devices. The users then create an account using their phone numbers to leverage all of the functionalities of the app. Including scanning the bill, calculating potential savings upon AC replacement, contacting a chatbot for 24/7 support and comparing consumptions relative to household size. While the app provides a personalized view, the processed users’ and bills’ information are aggregated and displayed on a dashboard for the SEA energy manager and other stakeholders.

The SEA CEO expressed how much he was proud to team with such innovative ideas and UOB CIC to produce something that is WW impactful.

The mobile application can be downloaded free of charge from the google play store as well as the app store.