Where Do Intelligent Water Systems Fit in the Smart City Movement? Insights From The IEEE Smart Cities Technical Community

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ABSTRACT

U.S. Cities are already an integral part of American life. They are home to 62.7% of the population but comprise just 3.5% of the land area. Furthermore, urbanization is only projected to continue such that by 2050 nearly 90% of the American population will live in cities. Such a large population within such a small land area creates enormous technical, social, and economic challenges that will require truly "smart" solutions. For these reasons, the IEEE has launched its Smart Cities Technical Community (IEEE-SCTC) as a multi-disciplinary collaborative effort. This presentation serves to introduce this new initiative and the water sector's place in the smart city movement. The IEEE-SCTC is organized into six application domains that address fundamental city services: energy, water, mobility, health, waste, and food & agriculture. Innovations in these areas draw upon five functional domains: sensors and intelligent electronic devices, communication networks &the cyber-security, systems integration, intelligence & data analytics, and management & control platforms. The presentation will also highlight several opportunities for further collaboration for ISA members in the Water & Wastewater Division, as well as other ISA communities.

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