ALLIANCE TO SAVE ENERGY
using less. doing more.

ENERGY EFFICIENCY & DIGITAL TECHNOLOGIES

Akin Olumoroti – Manager, Research and Analysis

03-28-2022

AGENDA

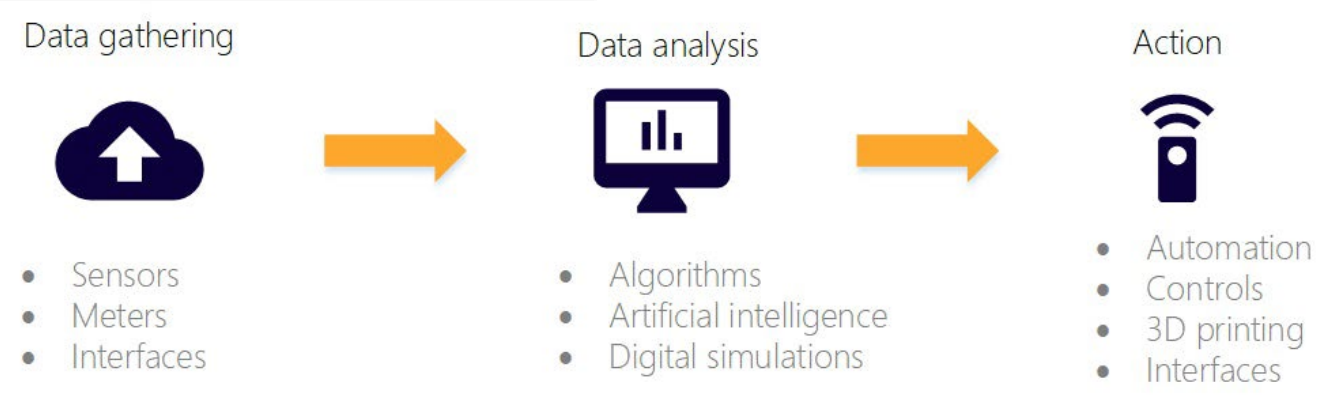
- Definitions and Myths
- Background
- Digital Technologies that enhance Energy Efficiency
- Enabling Infrastructure and Resources
- Enabling Policies
- EE Investment Gap
- Case Study
- Questions

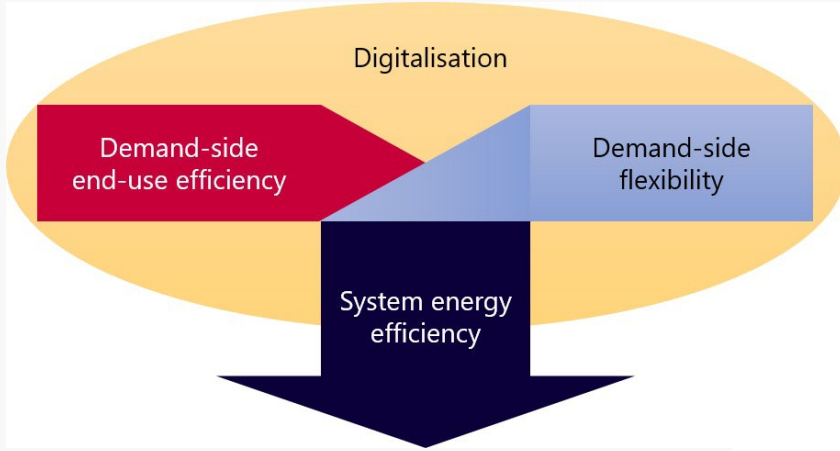
Definitions and Myths

- What is Energy Efficiency? Why Energy Efficiency?
- Traditional Energy Efficiency
- Energy Efficiency vs. Energy Conservation
  - *Conservation*: Using less energy by adjusting behaviors and habits.
  - *Efficiency*: Using technology that requires less energy to perform the same function.
- **Active Efficiency**

BACKGROUND

- Active Efficiency
  - Benefits of traditional energy efficiency measures + opportunities presented by digital technologies
  - Why? Traditional energy efficiency alone may not get us there

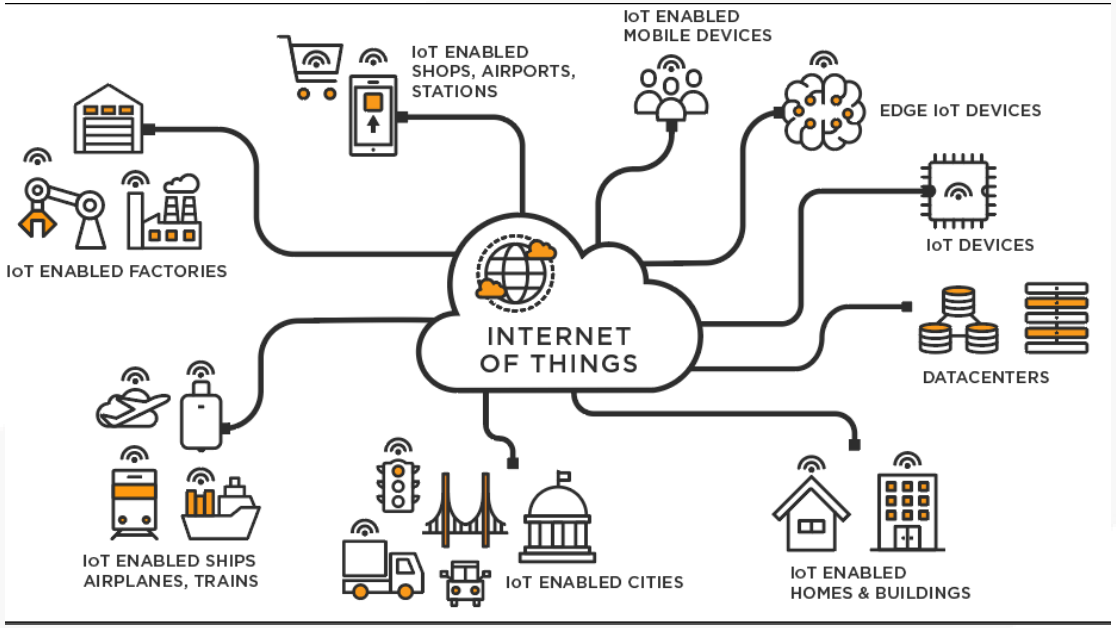




The Active Efficiency Collaborative – A coalition of industry leaders, NGOs, and public sector institutions working to accelerate the adoption of Active Efficiency.

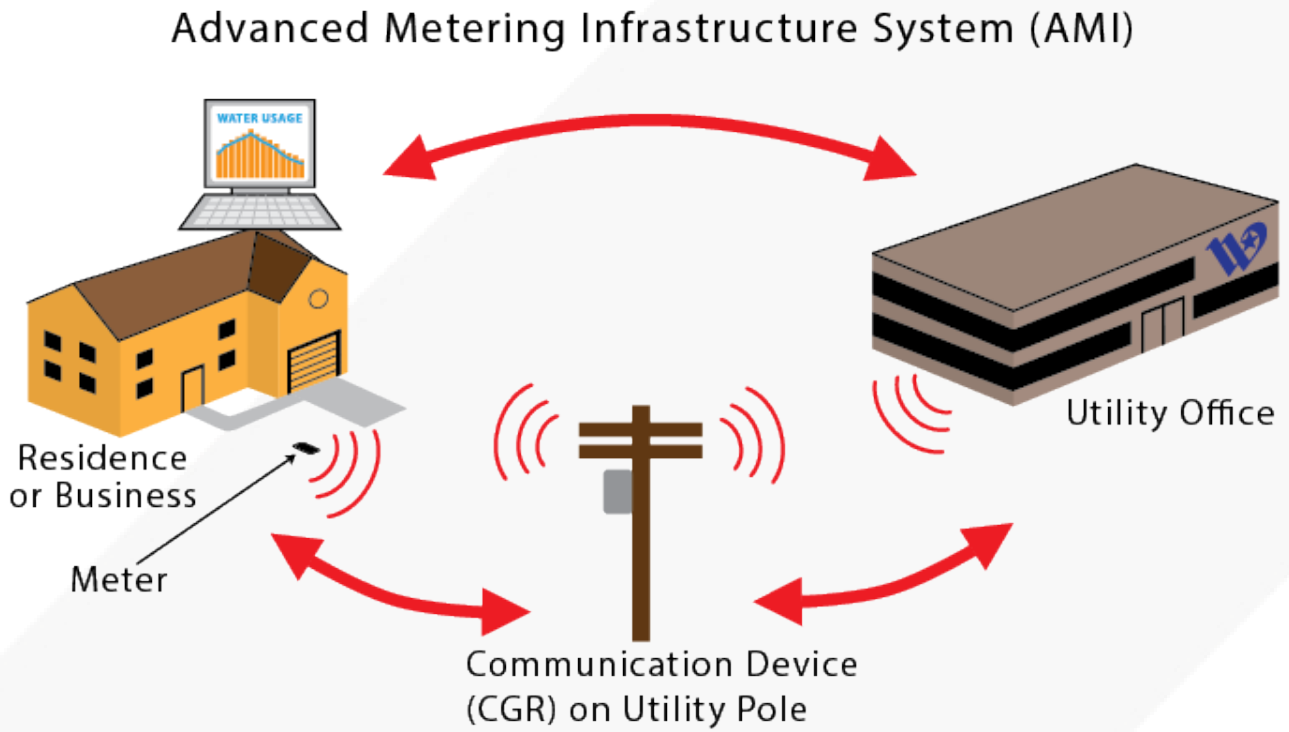
Digital Technologies that Enhance EE

- Internet of Things (IoT)
- Advanced Analytics and Cloud-based Platforms
- Predictive & Automated Controls

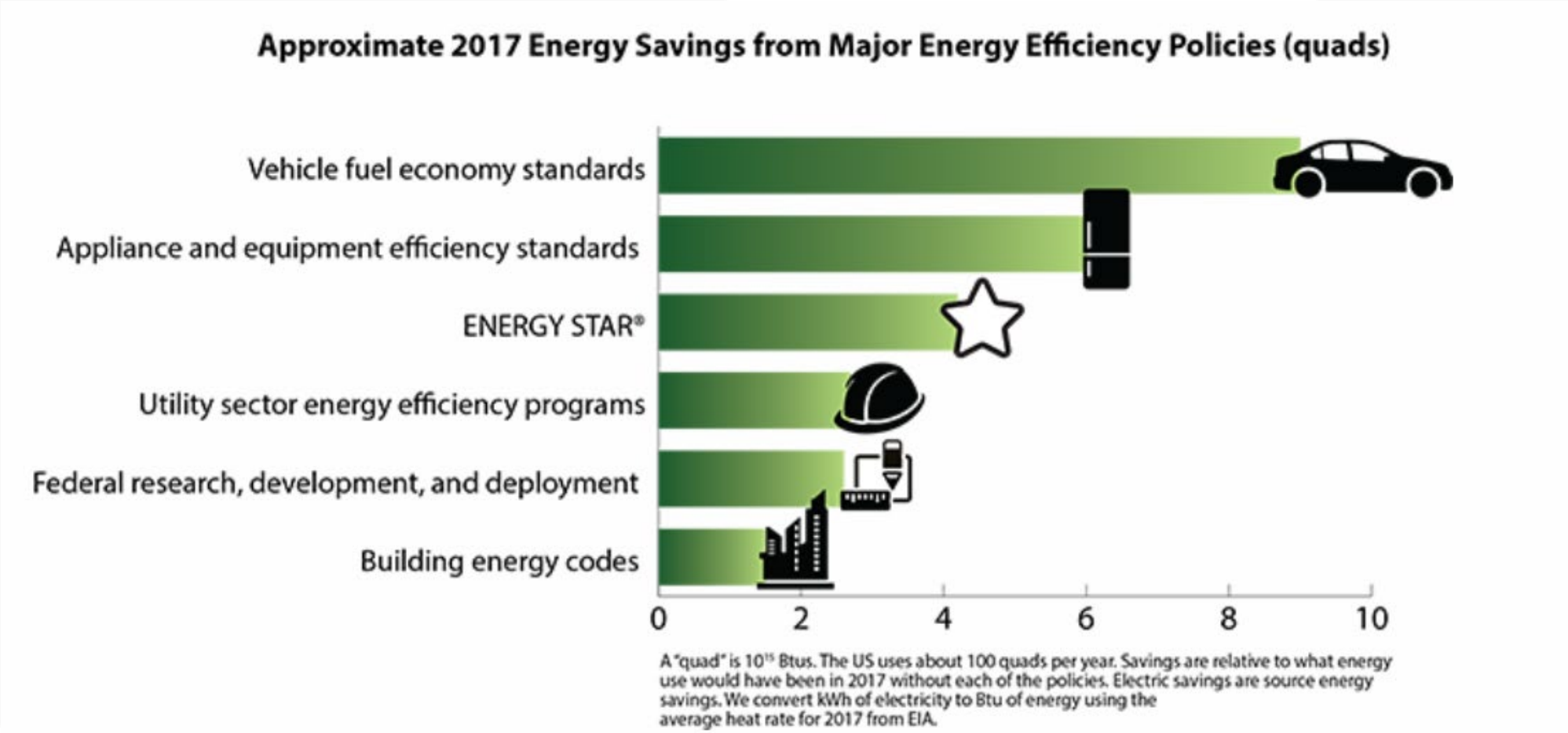


Enabling Infrastructure & Resources

- Advanced Metering & Controls
- Broadband
- Distributed Energy Resources
- Demand Response
- Beneficial Electrification
- Storage



Enabling Policies



- FERC Order 2222

Other Enabling Policies

- Performance-based Utility Programs
- Subsidies
- Nudges

Case Study - ACTIVE EFFICIENCY AT WORK

Energy to implement Centrica Business Solutions' Panoramic Power technology, reducing their energy consumption and unlocking significant cost savings.

Presentation last saved: 21m ago

11.4	$1.2M	308%
GWh cumulative energy reduction in 34 months	USD in avoided costs	return on investment

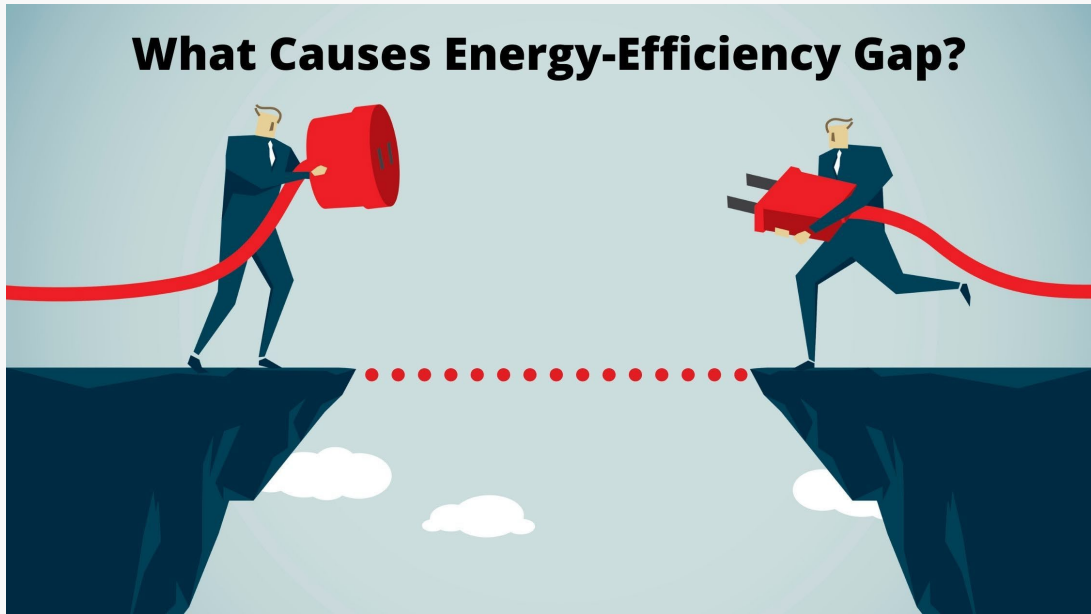
Energy Demand - 70% Reduction

Emissions Reduction – More than 37,000 metric tons of CO_2

Cost Savings - $6.9 M

The Energy Efficiency Gap

- Energy Efficiency investments should be more both from a consumer perspective and a societal perspective.
- **Possible Explanations**
  - Market Failures
  - Behavioral Failures
  - Hidden Costs



QUESTIONS

For further enquiries, visit www.activeefficiency.org , www.ase.org or contact

Akin Olumoroti
Manager – Research and Analysis
aolumoroti@ase.org