7. Toolkit: Smart Cities

John Dulac and Mel Slade

Paris, 23 May 2019

IEA #energyefficientworld
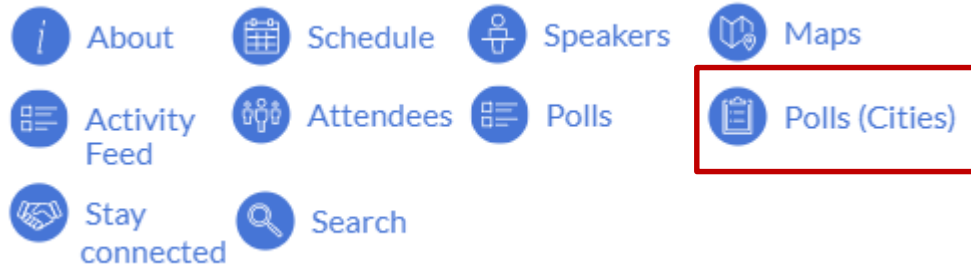
7. Toolkit: Smart Cities

Trainer(s): John Dulac and Mel Slade

Scenario: Your mayor wants to be known for innovative solutions.

Question: What are the ways you can use digitalisation to further reduce urban energy use and improve urban services?

Which of the following are available/used in your municipality ?

About   Schedule   Speakers   Maps

Activity Feed   Attendees   Polls   **Polls (Cities)**

Stay connected   Search

7. Toolkit: Smart Cities

1. **Energy efficiency in smart cities**
   - Focusing on energy demand
   - Elements of a smart city services

   10 mins

2. **Activity 1: Smart solutions**

   15 mins

3. **Activity 2: Enabling energy efficient smart cities**

   30 mins

1. Energy efficiency in smart cities

What do we think of when we hear smart city?
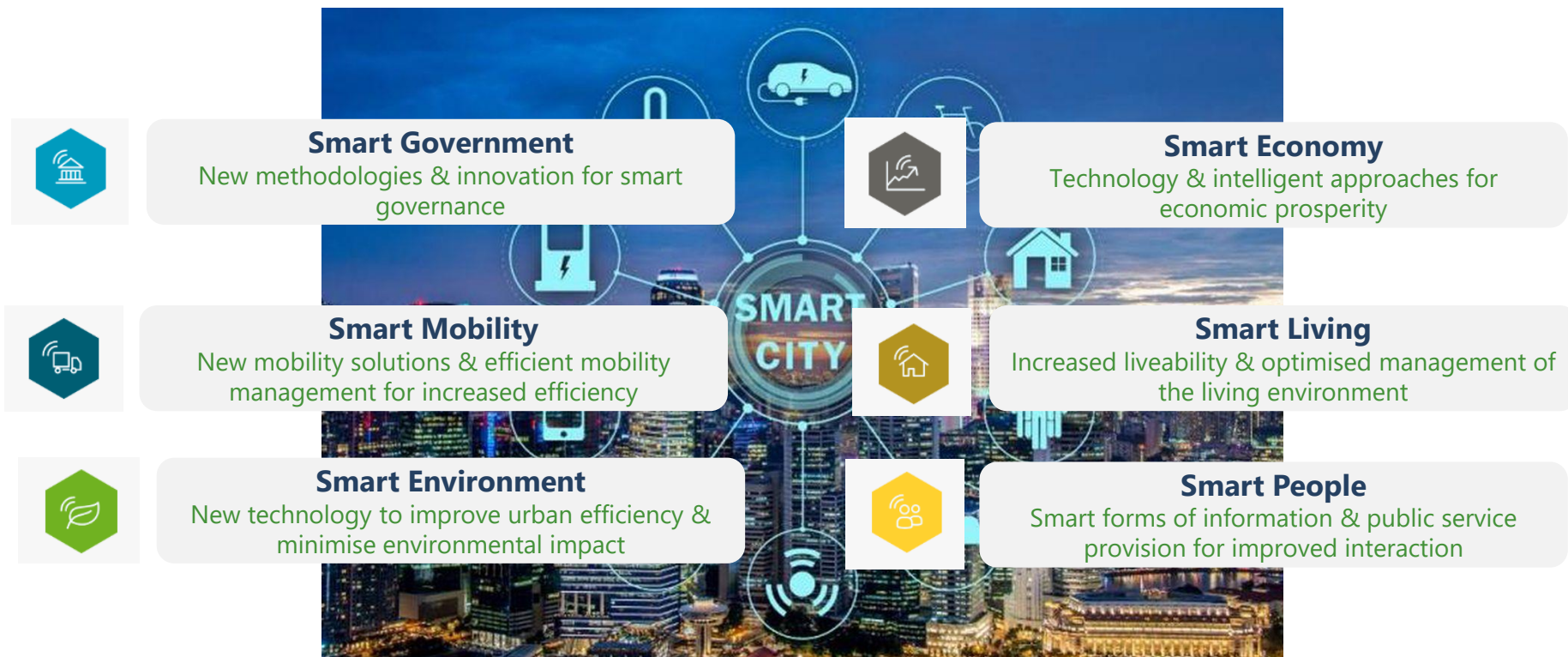
Smart Government
New methodologies & innovation for smart governance

Smart Economy
Technology & intelligent approaches for economic prosperity

Smart Mobility
New mobility solutions & efficient mobility management for increased efficiency

Smart Living
Increased liveability & optimised management of the living environment

Smart Environment
New technology to improve urban efficiency & minimise environmental impact

Smart People
Smart forms of information & public service provision for improved interaction

What do we think of when we hear smart city?

Growing amount of data and analytics that can be done

Visualisation of an urban informatics service:

Source: Adapted from ARUP Smart Cities - file:///C:/Users/Mbazima_N/Downloads/Arup_SmartCities_June2011%20(1).pdf

7
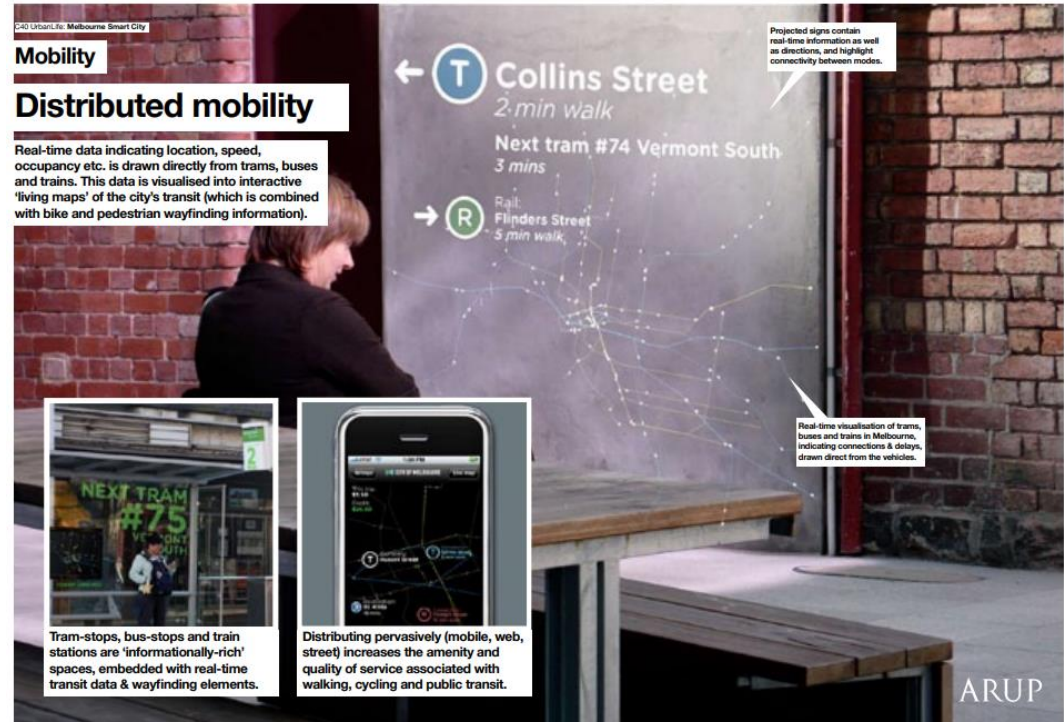
Activity 1: Smart solutions

List out some of the smart solutions to increase energy efficiency in the following sectors

Transport	Water	Lighting

Urban Design	Buildings	Waste

Activity 1: Smart solutions

Some of the examples:

Transport

Smart Mobility as a service

Water

Leakage and energy management systems

Lighting

Intelligent lighting systems

Urban Design
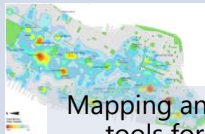
Mapping and other data tools for planning

Buildings

Smart building controls

Waste

Smart bins

Activity 2: Enabling energy efficient smart cities

Breaking apart the elements of a smart solution

SERVICE

DATA

INFRA-STRUCTURE

Smart building controls

Enterprise Server (software)

Reports Server (software)

Power Manager Server (software)

Servers
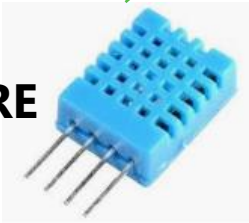
Building temperature and humidity sensors

Electric meter

Lighting systems
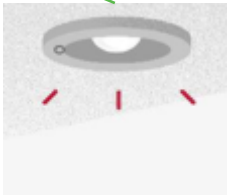
Motion detectors

Break out into 3 groups and choose one of the topic and determine its contributors

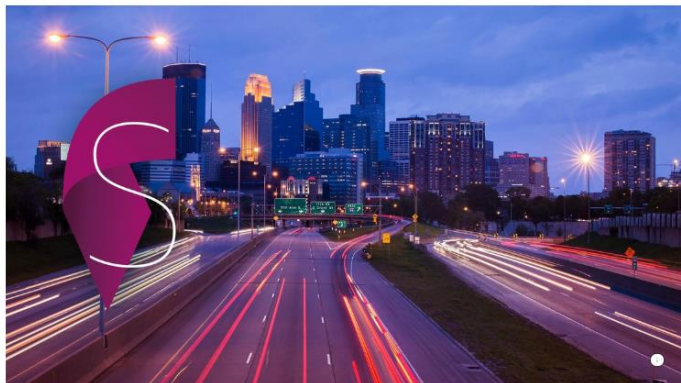| Transport	Water	Lighting
Smart Mobility as a service	Leakage and energy management systems	Intelligent lighting systems

- Elaborate the issues that you might face in infrastructure, data, and service delivery (privacy, cost, ownership, legal authority?)
- Use the internet if necessary

Key Resources

MOOC: Smart Cities – Management of Smart Urban Infrastructures

Learn about the principles of management of urban infrastructures in the era of Smart Cities. The introduction of Smart urban technologies into legacy infrastructures has already resulted and will continue to result in numerous challenges and opportunities. This course will help you to make the best out of the introduction of these smart technologies in your cities' legacy infrastructures.

https://www.coursera.org/learn/smart-cities

SHARINGCITIES

http://www.sharingcities.eu/

ASEAN SMART CITIES NETWORK

https://asean.org/asean/asean-smart-cities-network/

EIP-SCC

The Marketplace of the European Innovation Partnership on Smart Cities and Communities

DISCOVER | WHAT'S ON?

ACTION CLUSTERS | GENERAL ASSEMBLY 2019

INITIATIVES | MATCHMAKING CITIES WITH FINANCE

LIGHTHOUSE PROJECTS | EVENTS
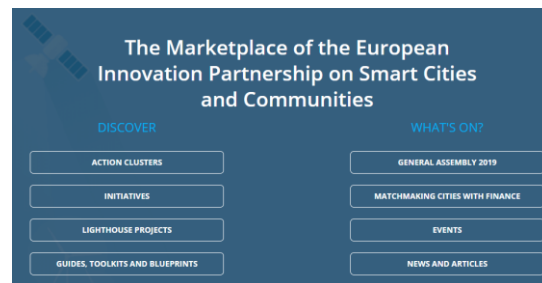
GUIDES, TOOLKITS AND BLUEPRINTS | NEWS AND ARTICLES

https://eu-smartcities.eu/

www.iea.org

IEA #energyefficientworld