

# SmartCity projects in Stockholm



Gustaf Landahl  
City of Stockholm

The Capital of Scandinavia

# Vision 2040

## – A Stockholm for Everyone –

- A cohesive city
- A climate-smart city
- A financially sustainable city
- A democratically sustainable city



Stockholms  
stad

# Strategy for a Smart & Connected Stockholm

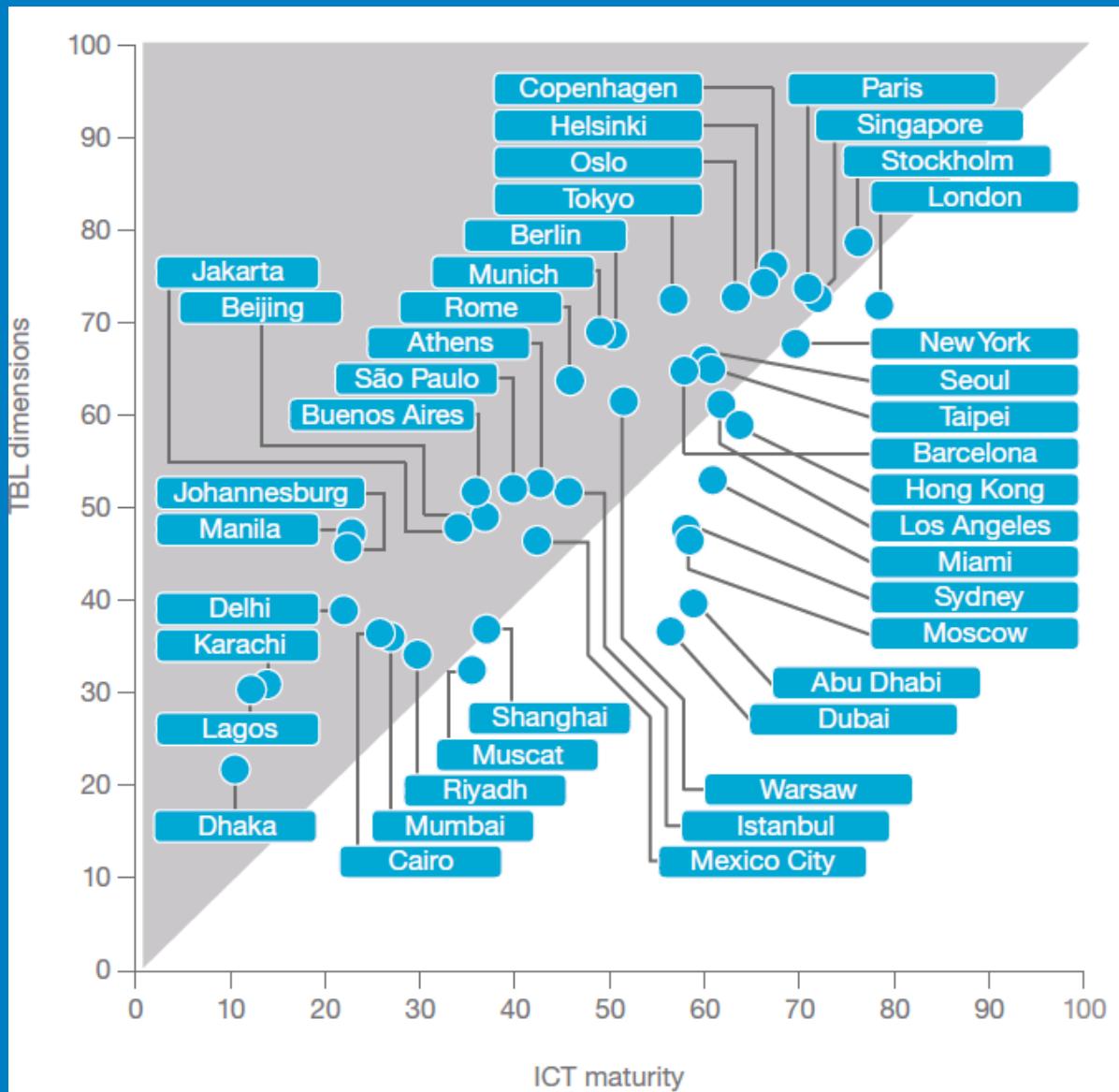


# Examples

- The City of Stockholm owns the world's largest open fiber network.  
more than 5 500 kilometers of fiber cable long.
- [Stockholm Open Award](#)
- [E-services](#)
- Apps



# Relation Sustainable development and ICT



Source: Networked society city index 2016

Figure 2 – 2016 Networked Society City Index ranking and the relation between TBL and ICT



# GrowSmarter

for a Fossil free Stockholm 2040



The Capital of Scandinavia

# Increased ambitions



"1,5 degrees"



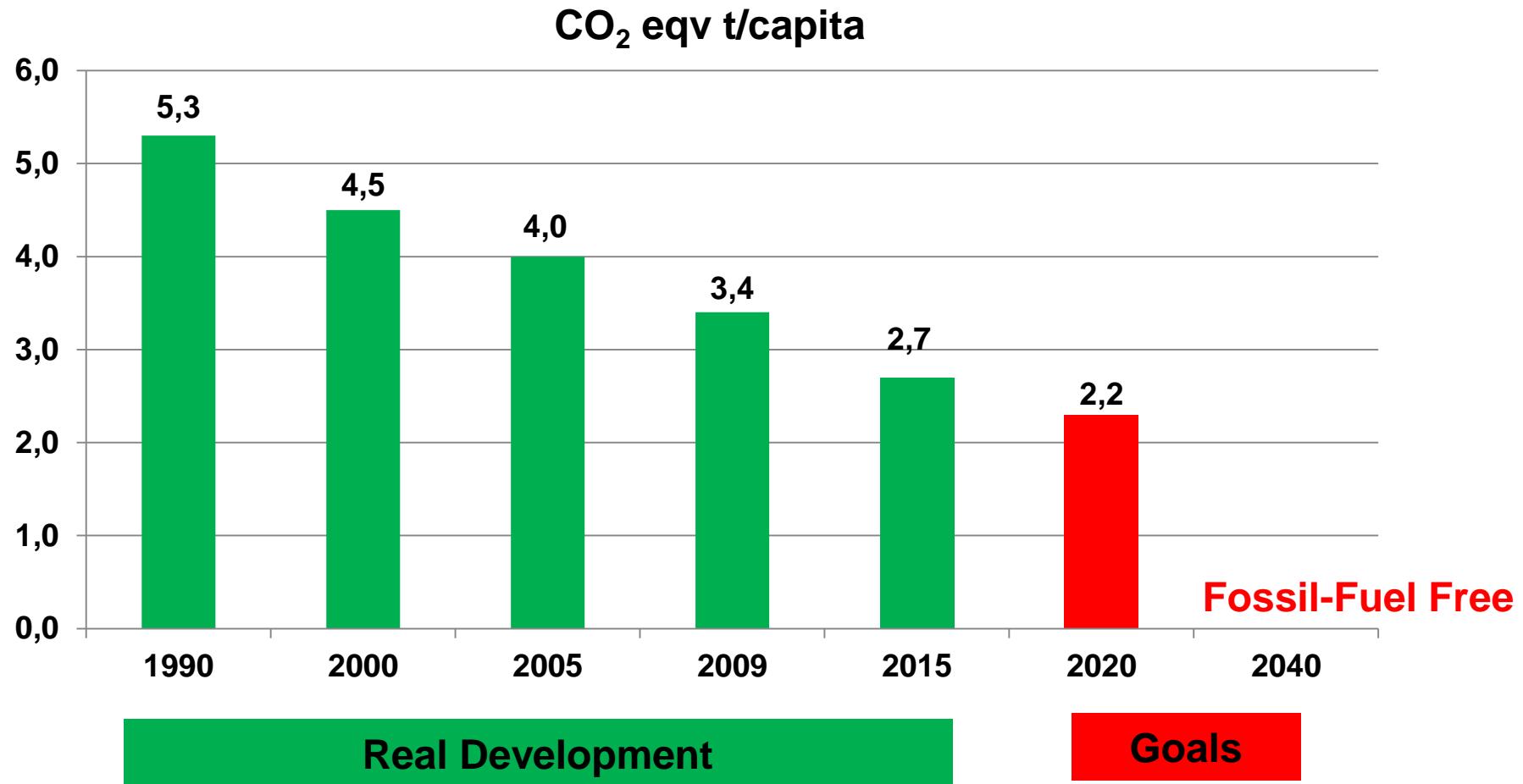
"Net zero 2045"



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"Fossil fuel free 2040"

# Goals and achievements



# THE GROWSMARTER PROJECT 2015-19

## Creating a Market for 12 Smart Solutions





Cities face the same challenges

# GrowSmarter shows 12 smart solutions!



# LOW ENERGY DISTRICTS

## Smart solutions:

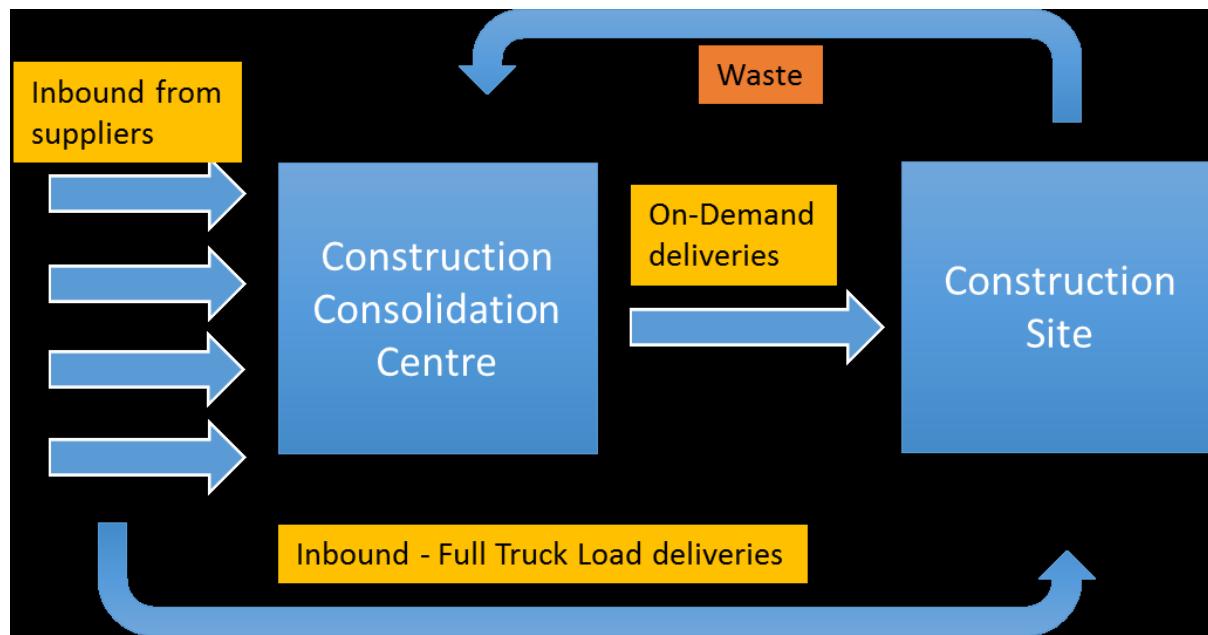
1. Efficient and smart climate shell refurbishment



# LOW ENERGY DISTRICTS

## Smart solutions:

1. Efficient and smart climate shell refurbishment
2. Smart Building logistics and alternative fuelled vehicles



# LOW ENERGY DISTRICTS

## Smart solutions:

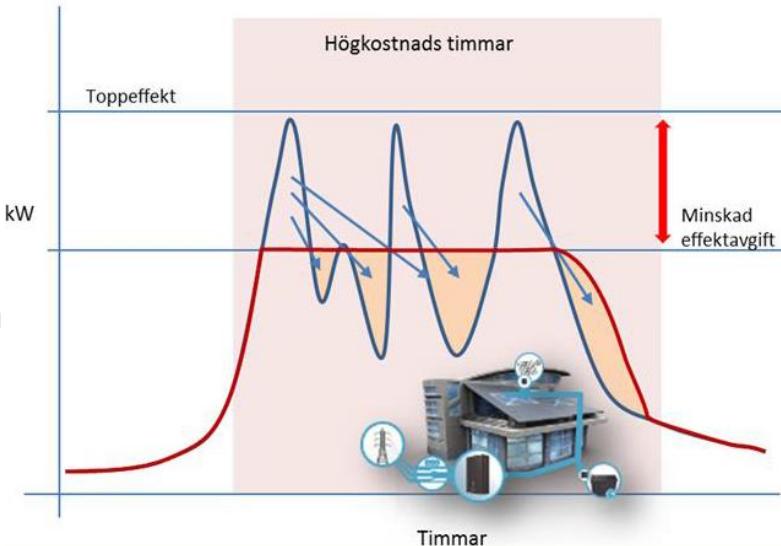
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2. Smart Building logistics and alternative fuelled vehicles
3. Smart, energy saving tenants through information



# LOW ENERGY DISTRICTS

## Smart solutions:

1. Efficient and smart climate shell refurbishment
2. Smart Building logistics and alternative fuelled vehicles
3. Smart, energy saving tenants through information
4. Smart local production of electricity and integration with power grid



**VPP – Virtual Power Plant**  
**VPM – Virtual Power Management**

# INTEGRATED INFRASTRUCTURES

## Smart solutions:

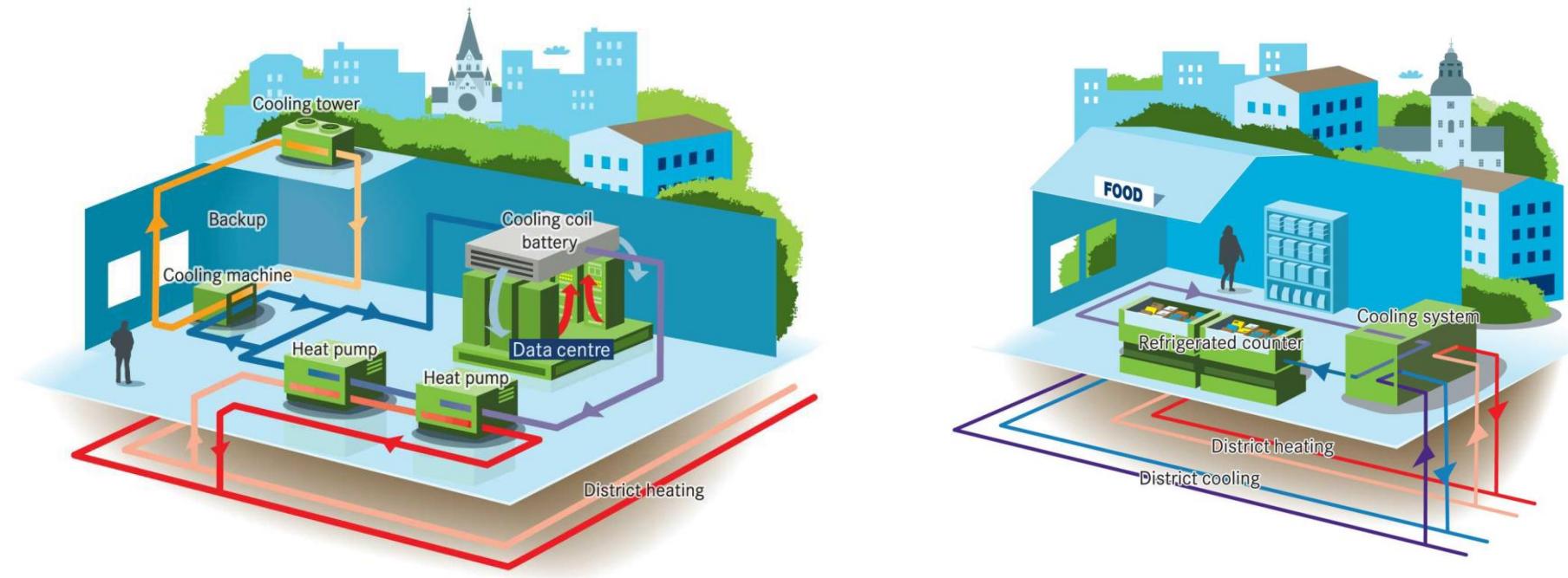
5. Smart lighting, lamp & traffic-posts as hubs for communication



# INTEGRATED INFRASTRUCTURES

## Smart solutions:

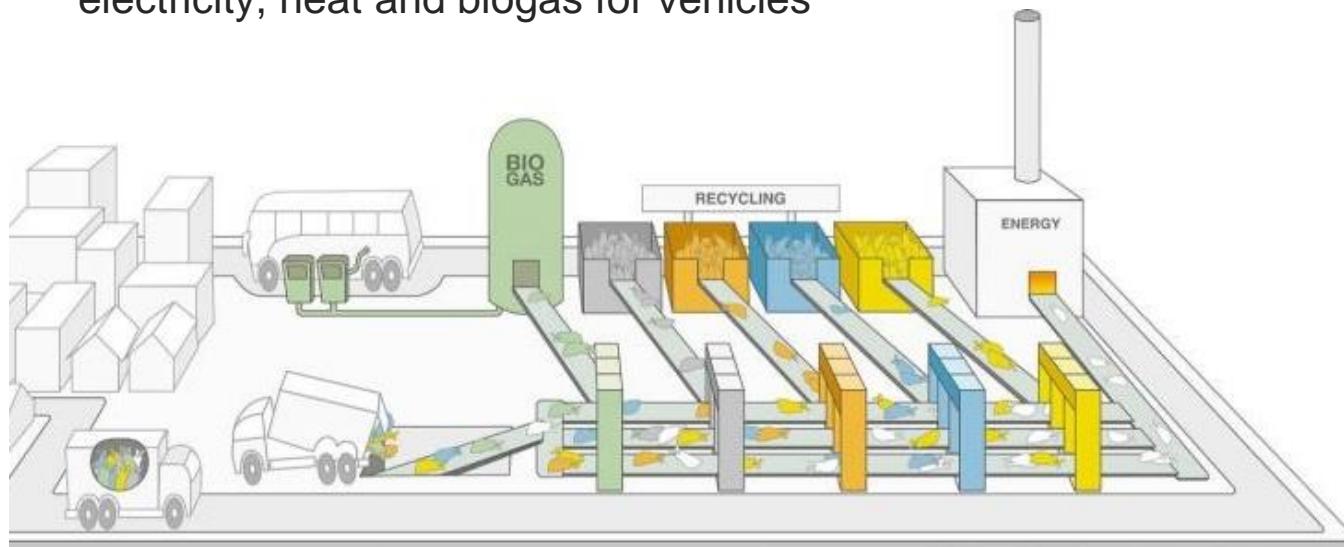
5. Smart lighting, lamp & traffic-posts as hubs for communication
6. Waste heat and local heat integration by new business models



# INTEGRATED INFRASTRUCTURES

## Smart solutions:

5. Smart lighting, lamp & traffic-posts as hubs for communication
6. Waste heat and local heat integration by new business models
7. Smart waste handling turning waste to electricity, heat and biogas for vehicles



# INTEGRATED INFRASTRUCTURES

## Smart solutions:

5. Smart lighting, lamp & traffic-posts as hubs for communication
6. Waste heat and local heat integration by new business models
7. Smart waste handling turning waste to electricity, heat and biogas for vehicles
8. Big data protocol for saving energy and improving the quality of life



# SUSTAINABLE MOBILITY

## Smart solutions:

### 9. Sustainable delivery:



# SUSTAINABLE MOBILITY

## Smart solutions:

9. Sustainable delivery
10. Smart traffic management



# SUSTAINABLE MOBILITY

## Smart solutions:

9. Sustainable delivery
10. Smart traffic management
11. Alternative fuel driven vehicles for decarbonizing and better air quality



# SUSTAINABLE MOBILITY

## Smart solutions:

9. Sustainable delivery
10. Smart traffic management
11. Alternative fuel driven vehicles for decarbonizing and better air quality
12. Smart mobility solutions



# STOCKHOLM, COLOGNE AND BARCELONA

- **Lighthouse-cities show the way**
- Implement smart solutions together with industrial partners
- Show other interested cities
- Supply info to research partners



# INDUSTRIAL PARTNERS



INSERO  
E-MOBILITY



RheinEnergie



ampido  
Parking is fun



DEUTSCHE WOHNUNGSGESELLSCHAFT mbH



driving telecom connectivity

anteverti



Institut de Recerca en Energia de Catalunya  
Catalonia Institute for Energy Research



Stockholmshem



# RESEARCH PARTNERS

Research partner energy/climate:

## DO THE SMART SOLUTIONS MEET THE GOALS?

- Energy
- Climate
- Decarbonize energy system
- Local air quality



[WWW.GROW-SMARTER.EU](http://WWW.GROW-SMARTER.EU)

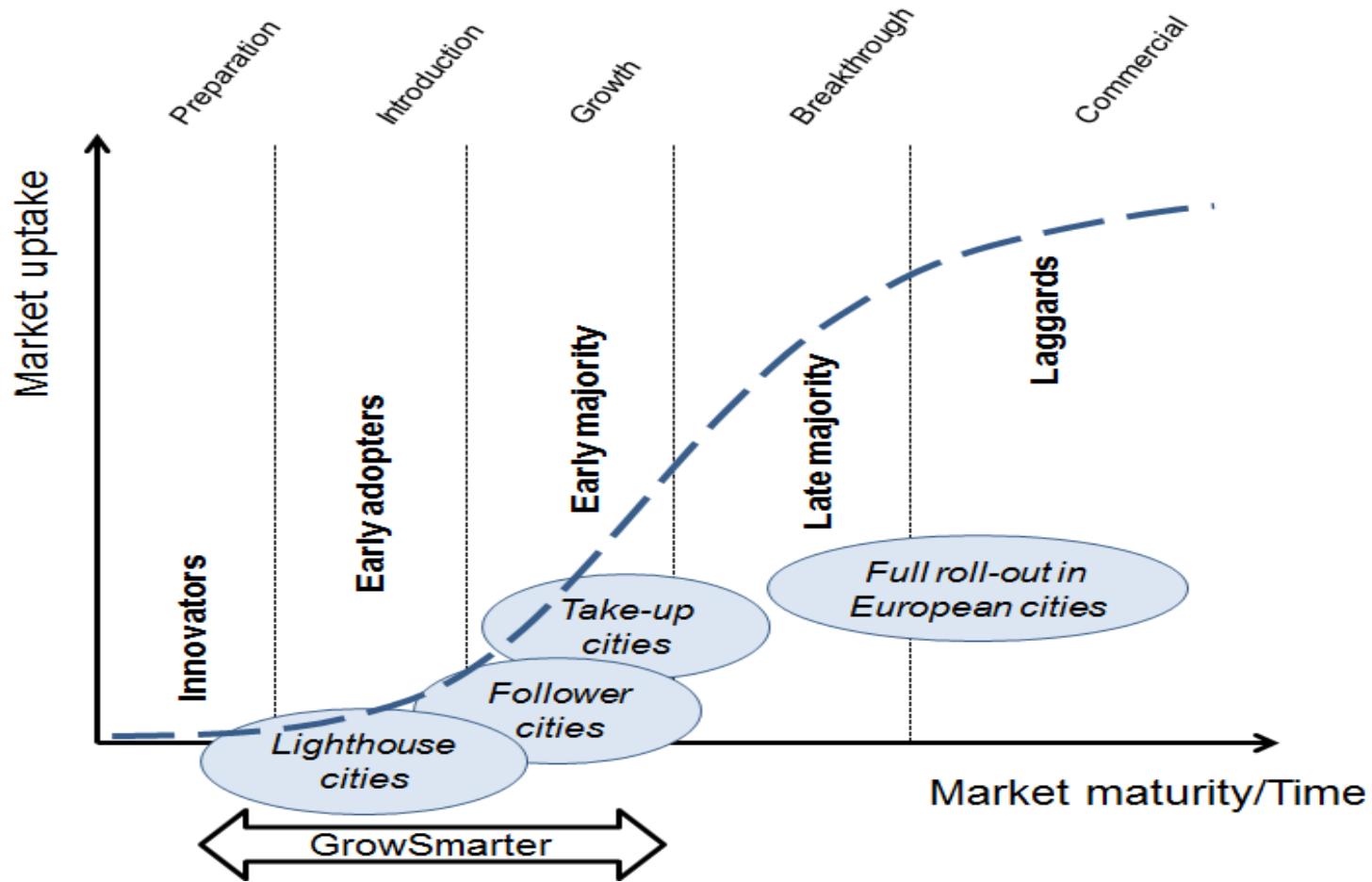
Research partner economy/growth:

## DO THE SMART SOLUTIONS MEET THE GOALS?

- ⑩ Short pay-back for investments
- ⑩ Trigger large scale economic investments
- ⑩ Create growth in Europe



# MARKET UPTAKE CURVE





# Help Europe Grow Smarter!



[www.grow-smarter.eu](http://www.grow-smarter.eu)  
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