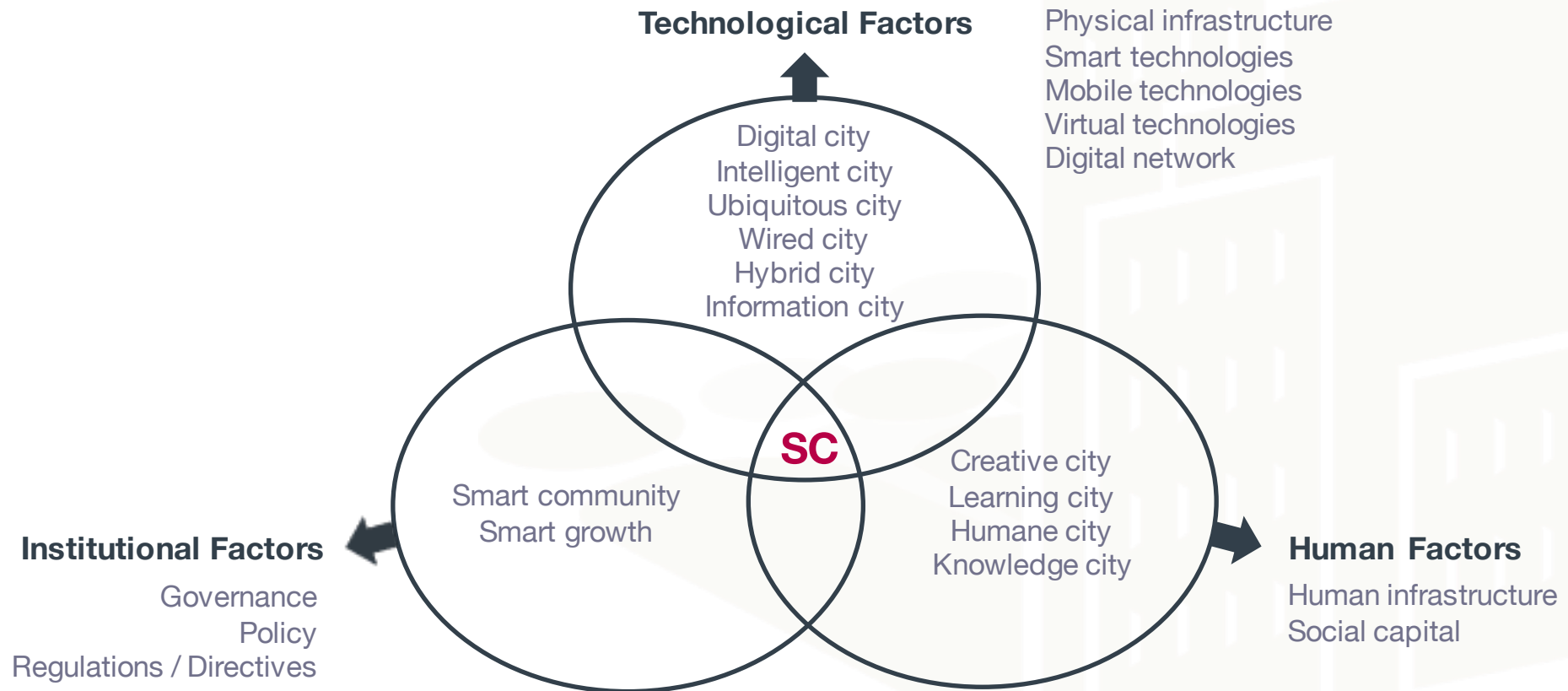




Prof. Dr. Nathalie Crutzen
Director

HEC Liège – University of Liege (Belgium)

The « Universe » of smart cities



Source : Nam and Pardo (2011)

Smart City : **A broad definition**

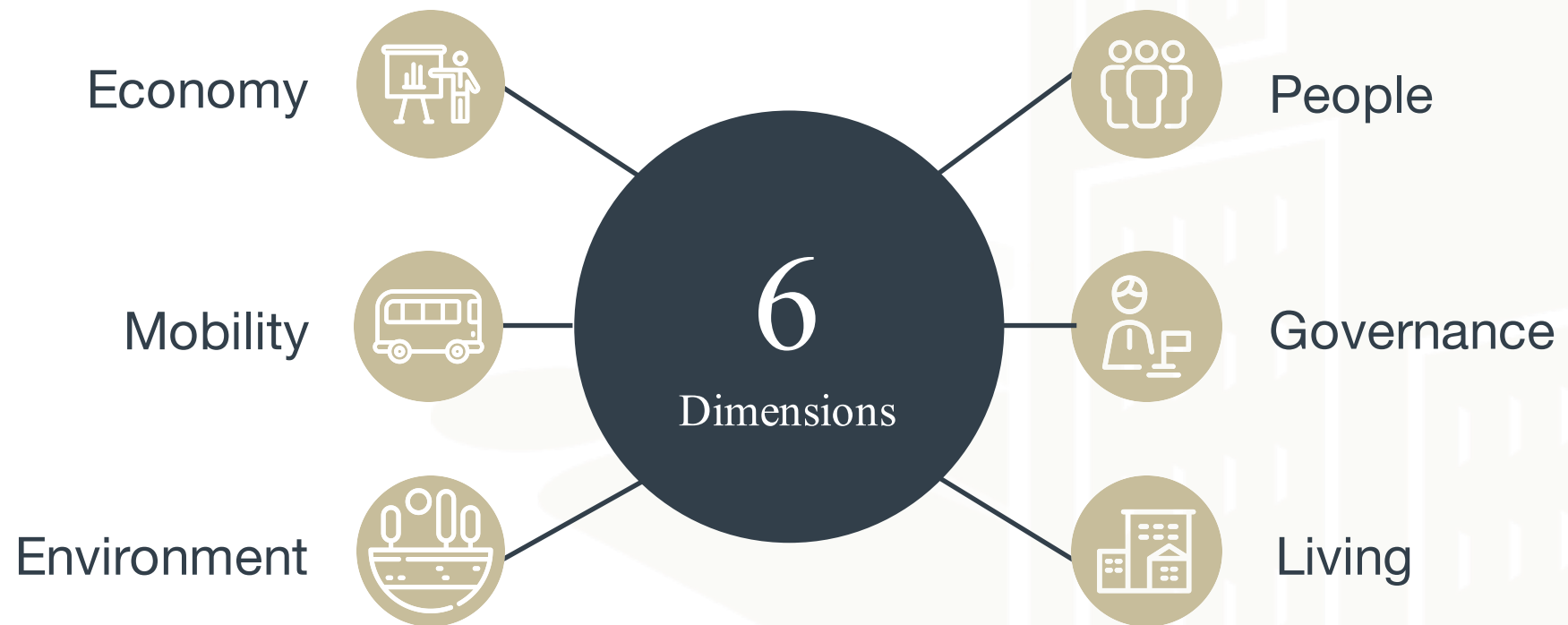
A “smart city” is a **multi-stakeholders’ ecosystem** (composed with local governments, citizens’ associations, multinational and local businesses, universities, international institutions...)

Engaged in a **sustainability strategy/transition**
(mobility, environment, economy, people, governance & living)

Using **technologies** (ICT mainly) as **enabler**

In order to become **more sustainable** (economic prosperity, social well-being & conservation of our natural resources)

Smart City : 6 key dimensions



THE STATE OF DEVELOPMENT OF SMART CITIES IN BELGIUM

FEBRUARY 2017

JONATHAN DESDEMOUSTIER

PhD researcher

PROF. NATHALIE CRUTZEN

Director



SMART
CITY
INSTITUTE

HEC Liège

RESEARCH OBJECTIVE



A quantitative
research amongst
Belgian municipalities



Key statistical
observations



1st significant scientific
research on the state of
development of smart
cities **in Belgium**

SAMPLE

RESPONDENTS



BELGIUM

POPULATION	589 MUNICIPALITIES
SAMPLE	113 MUNICIPALITIES
RATE	19%

SAMPLE

REPRESENTATIVITY



BELGIUM

REPRESENTATIVE



REGIONS

REPRESENTATIVE



URBAN/RURAL

REPRESENTATIVE

TOPIC #01 PERCEPTION

"HOW DO BELGIAN MUNICIPALITIES
PERCEIVE THE SMART CITY PHENOMENON?"

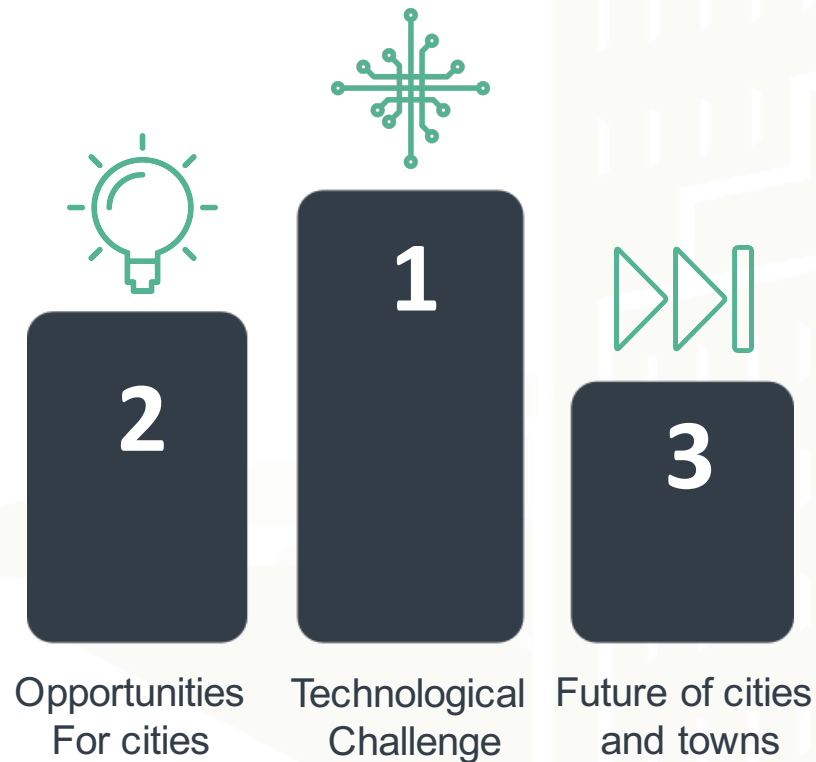


SMART CITY BAROMETER

DEFINITIONS



BELGIUM



SMART CITY BAROMETER

DEFINITIONS

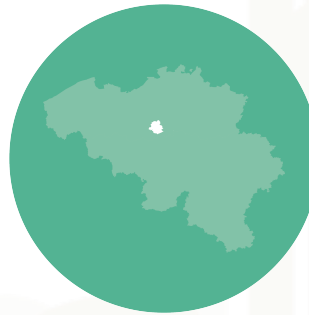
REGIONS



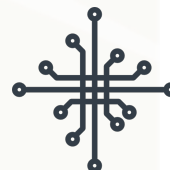
FLANDERS



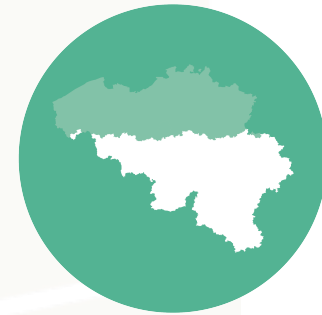
OPPORTUNITY



BRUSSELS



TECHNOLOGICAL CHALLENGE



WALLONIA



TECHNOLOGICAL CHALLENGE

SMART CITY BAROMETER



BELGIUM

66 % OF BELGIAN MUNICIPALITIES

FEEL CONCERNED BY THE CONCEPT
OF SMART CITY

SMART CITY BAROMETER

REGIONS



FLANDERS

YES **84%**
NO 16%



BRUSSELS

YES **88%**
NO 13%



WALLONIA

YES 45%
NO **55%**

SMART CITY BAROMETER

COMPONENTS & DIMENSIONS

6 DIMENSIONS OF THE SMART CITY

RANKING BY CITIES FROM 1: MOST IMPORTANT TO 6: LESS IMPORTANT



Smart Governance



Smart Environment



Smart Mobility

SMART CITY BAROMETER

PRIORITIES



BELGIUM - TOP 3



1. GOVERNANCE AND E-SERVICES

2. ENERGY EFFICIENCY



SUSTAINABLE
MOBILITY

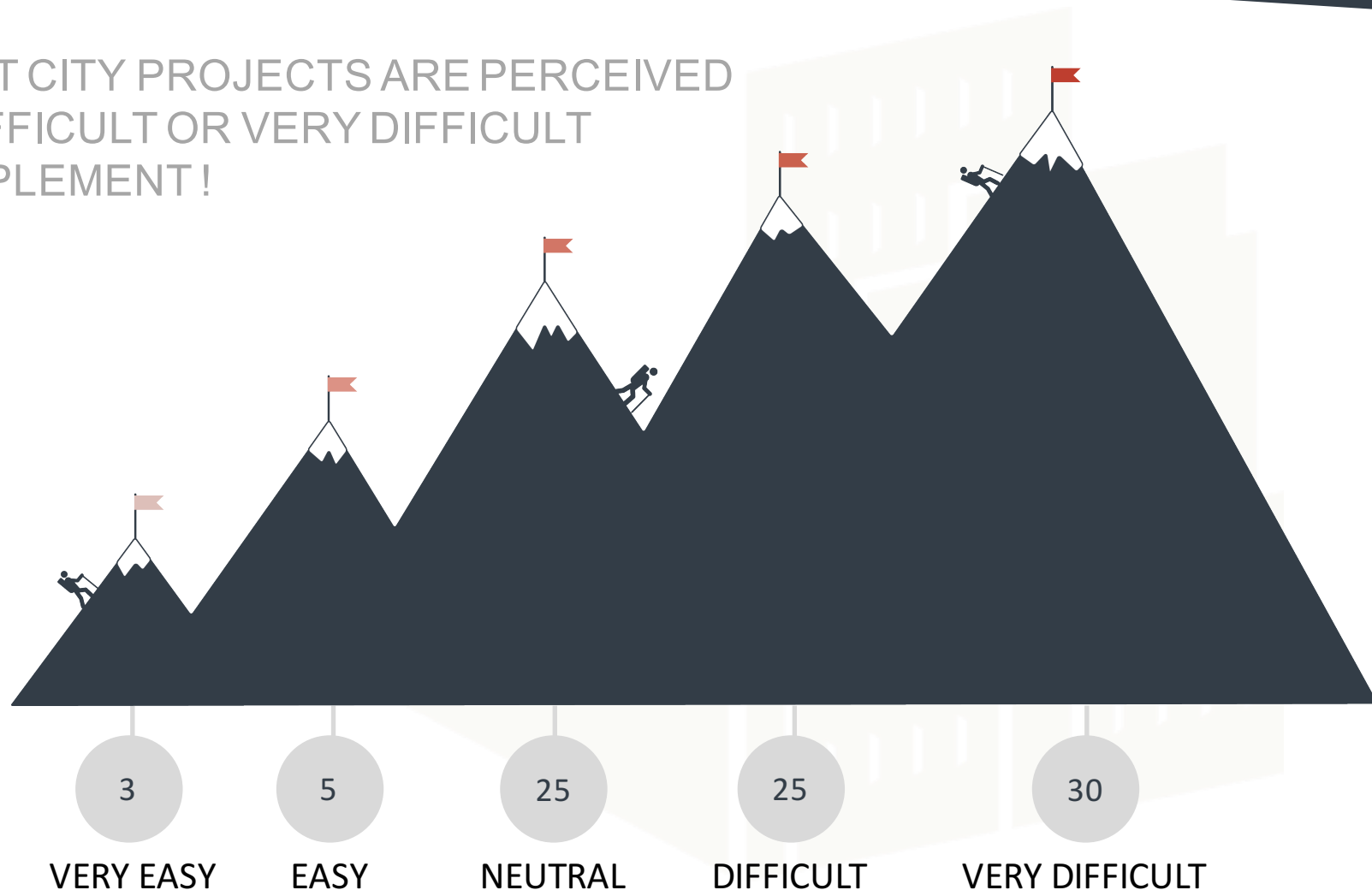
TOPIC #02 IMPLEMENTATION

"HOW DO BELGIAN
MUNICIPALITIES IMPLEMENT
SMART CITY PROJECTS ON THEIR TERRITORY?"



SMART CITY BAROMETER

SMART CITY PROJECTS ARE PERCEIVED AS DIFFICULT OR VERY DIFFICULT TO IMPLEMENT !

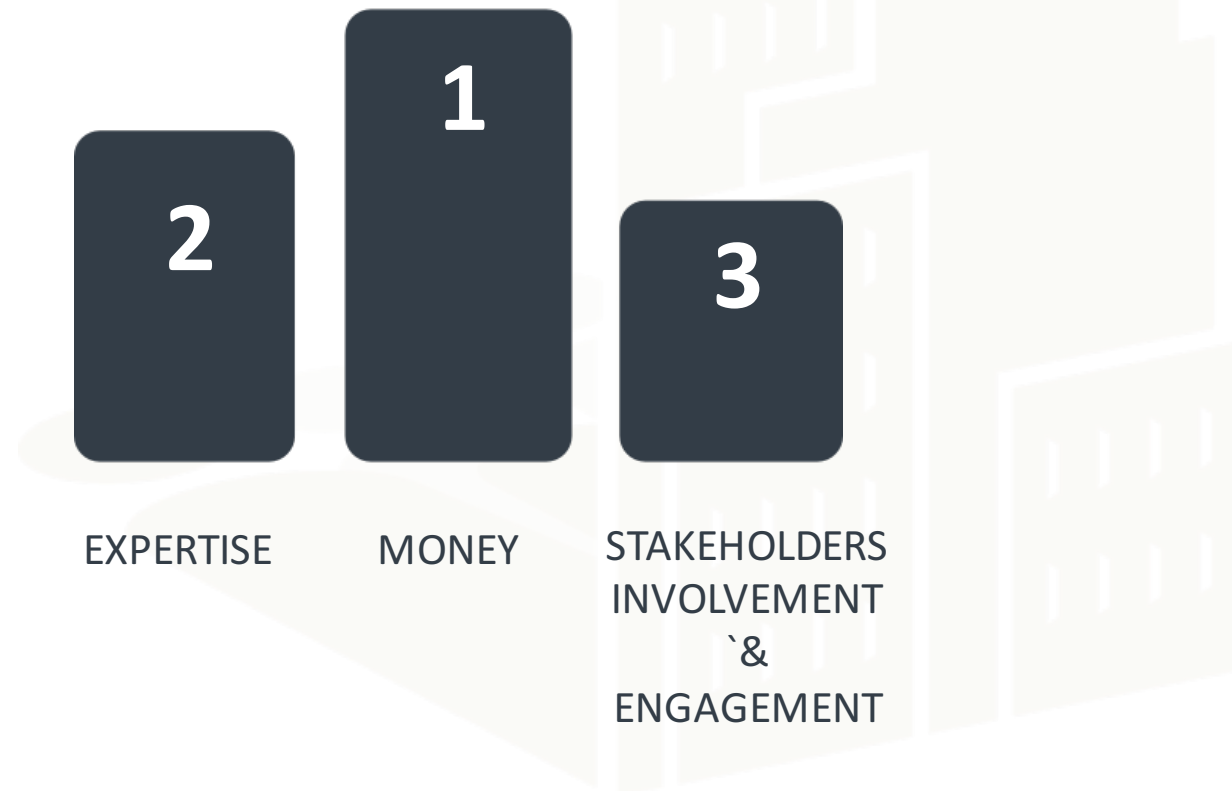


SMART CITY BAROMETER

BARRIERS



BELGIUM - TOP 3

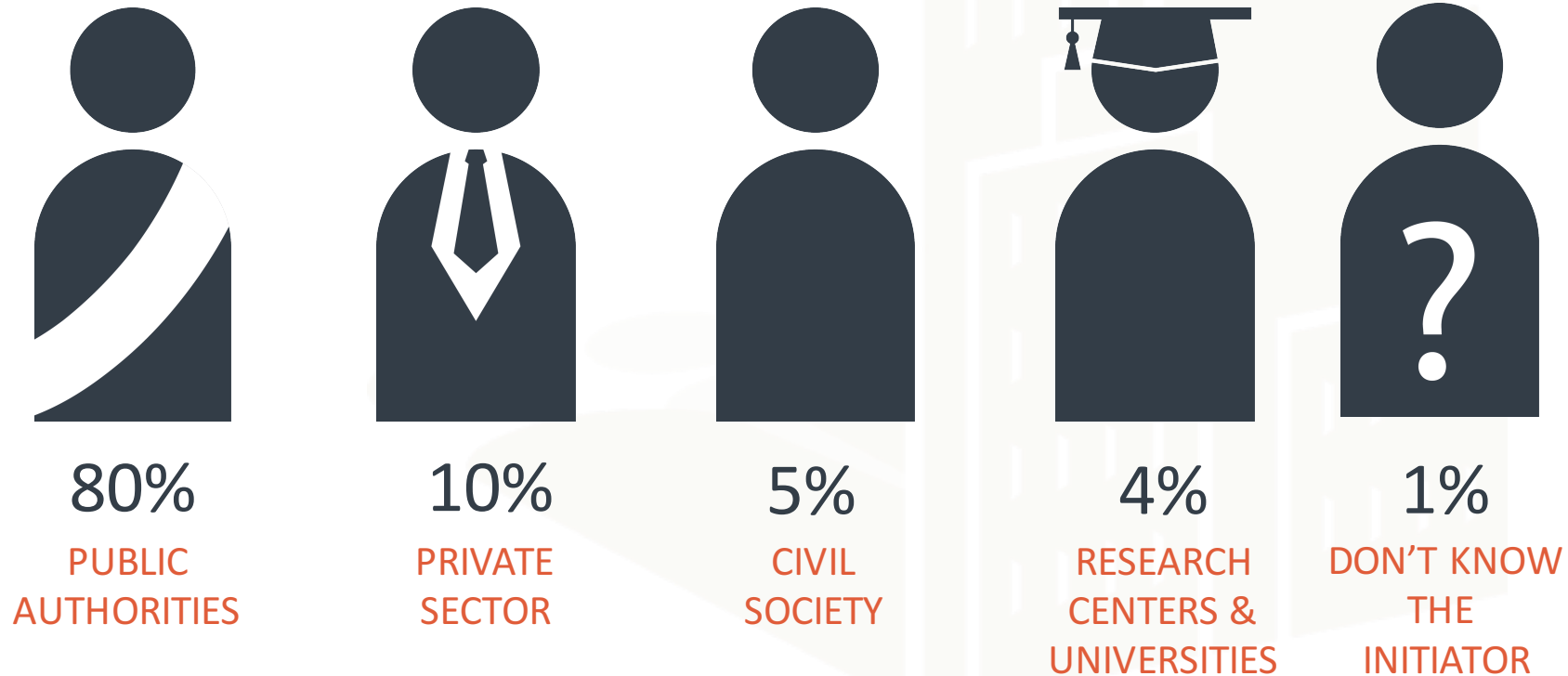


SMART CITY BAROMETER

STAKEHOLDERS

INITIATORS

MOST OF THE TIME PUBLIC AUTHORITIES ARE INITIATING
SMART CITY PROJECTS → TOP-DOWN APPROACH



SMART CITY BAROMETER

Belgian municipalities often perceive Smart City dynamics as a **TOP-DOWN process involving mainly local public actors**

Limited involvement of private actors, the Civil Society and ... citizens

TOPIC #03 MANAGEMENT

" HOW DO BELGIAN
MUNICIPALITIES MANAGE SMART
CITY-RELATED DYNAMICS?"



SMART CITY BAROMETER

MANAGEMENT

BELGIUM – SMART CITY PLAN

DO BELGIAN MUNICIPALITIES HAVE A SMART CITY STRATEGY?



SMART CITY BAROMETER

PEOPLE IN CHARGE

SMART CITY DEPARTMENT

IN BELGIAN MUNICIPALITIES

NONE OF BELGIAN MUNICIPALITIES

HAS A SMART CITY DEPARTMENT

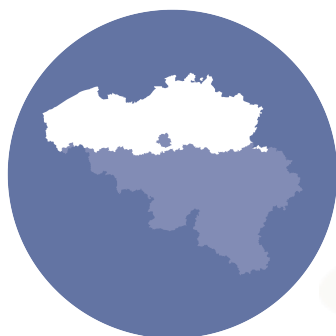
SMART CITY BAROMETER

PEOPLE IN CHARGE

SMART CITY MANAGERS

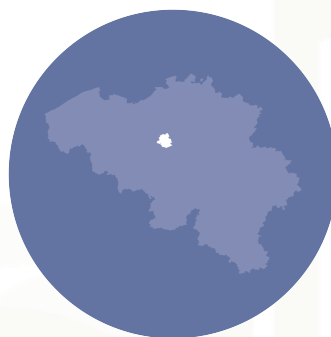
IN BELGIAN MUNICIPALITIES

17 municipalities have hired one or more Smart City manager(s)



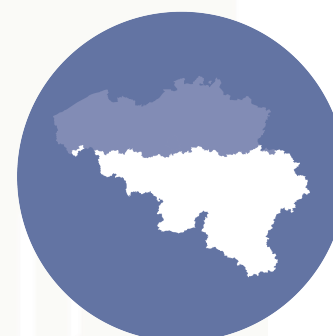
FLANDERS

6



BRUSSELS

2



WALLONIA

9

BAROMETER 2018

DEADLINE

January 19, 2018

LINK TO THE SURVEY

FR : www.smartcityinstitute.be/barometre

NL : www.smartcityinstitute.be/onderzoek



La partie de l'image avec l'ID de relation rld3 n'a pas été trouvée dans le fichier.

THANK YOU FOR YOUR ATTENTION



www.SmartCityInstitute.be



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ET LA WALLONIE INVESTISSENT DANS VOTRE AVENIR



Wallonie



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