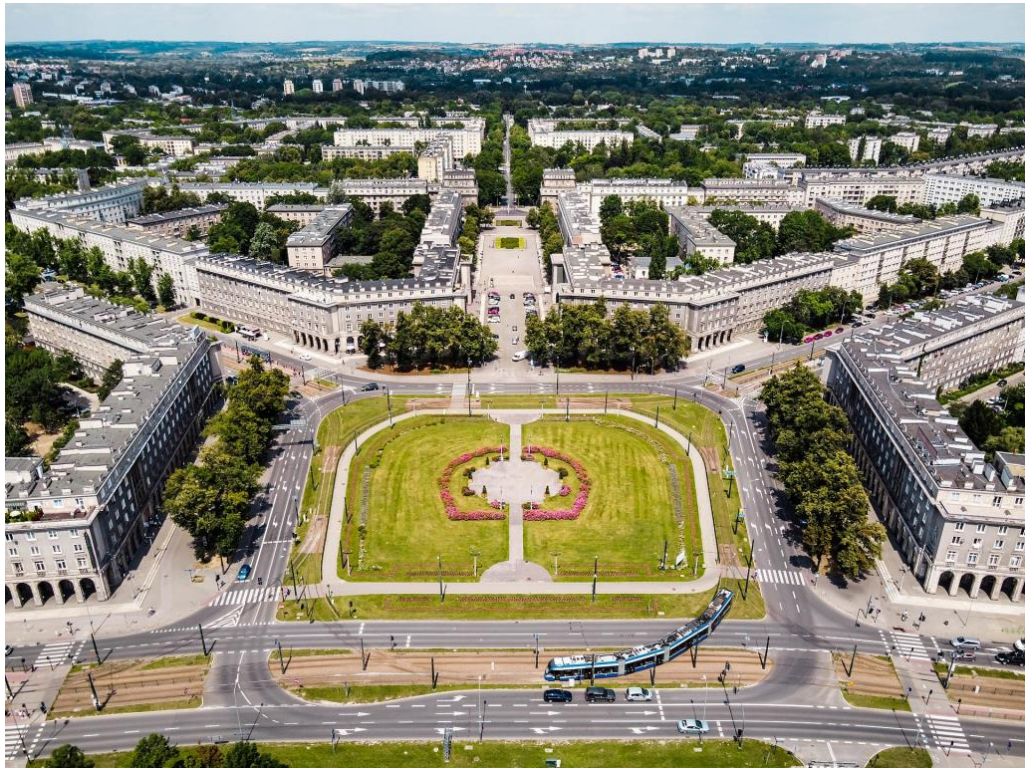
11.15 - 12.30

# Regional & Municipal Level

*Caroline Nevejan (chair) – Science officer City of Amsterdam*
*Sam Cole – Head of REF futures at Warwick University*
*Krzysztof Gluc – Director School of Public Administrtation, Kracow University of Economics*

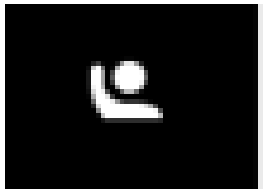
# Regional & Municipal Level



Nowa Huta room

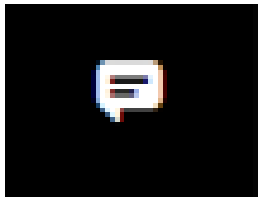
# Impact of Science

**4-6 November, Krakow**



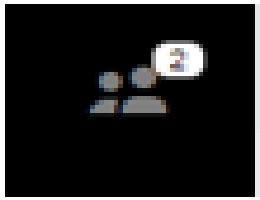
**Broadcast permission**:

- Turn on your microphone and/or camera
- Participate in the discussion



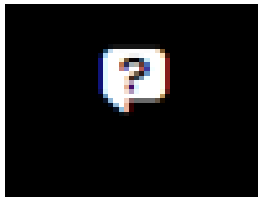
**Conversations**:

- General remarks
- Discussion
- News (links)



**Who are the attendees?**

- Speakers
- Participants



**Q&A**:

- (Targeted) questions
- Speakers answer the questions live

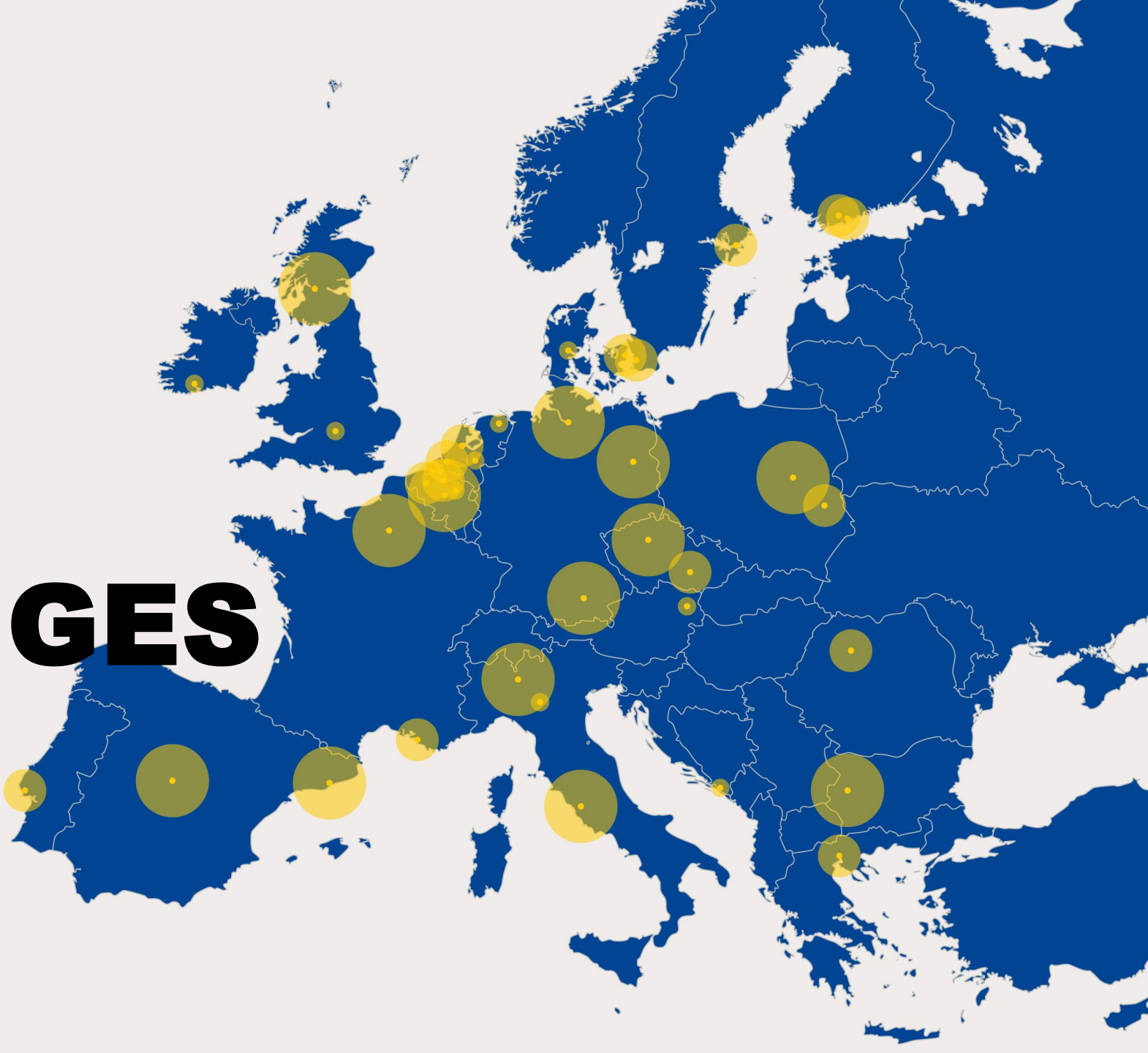
**Lay out view**:
Full screen, Tiled, Thumbnail

AESIS

#IoS20

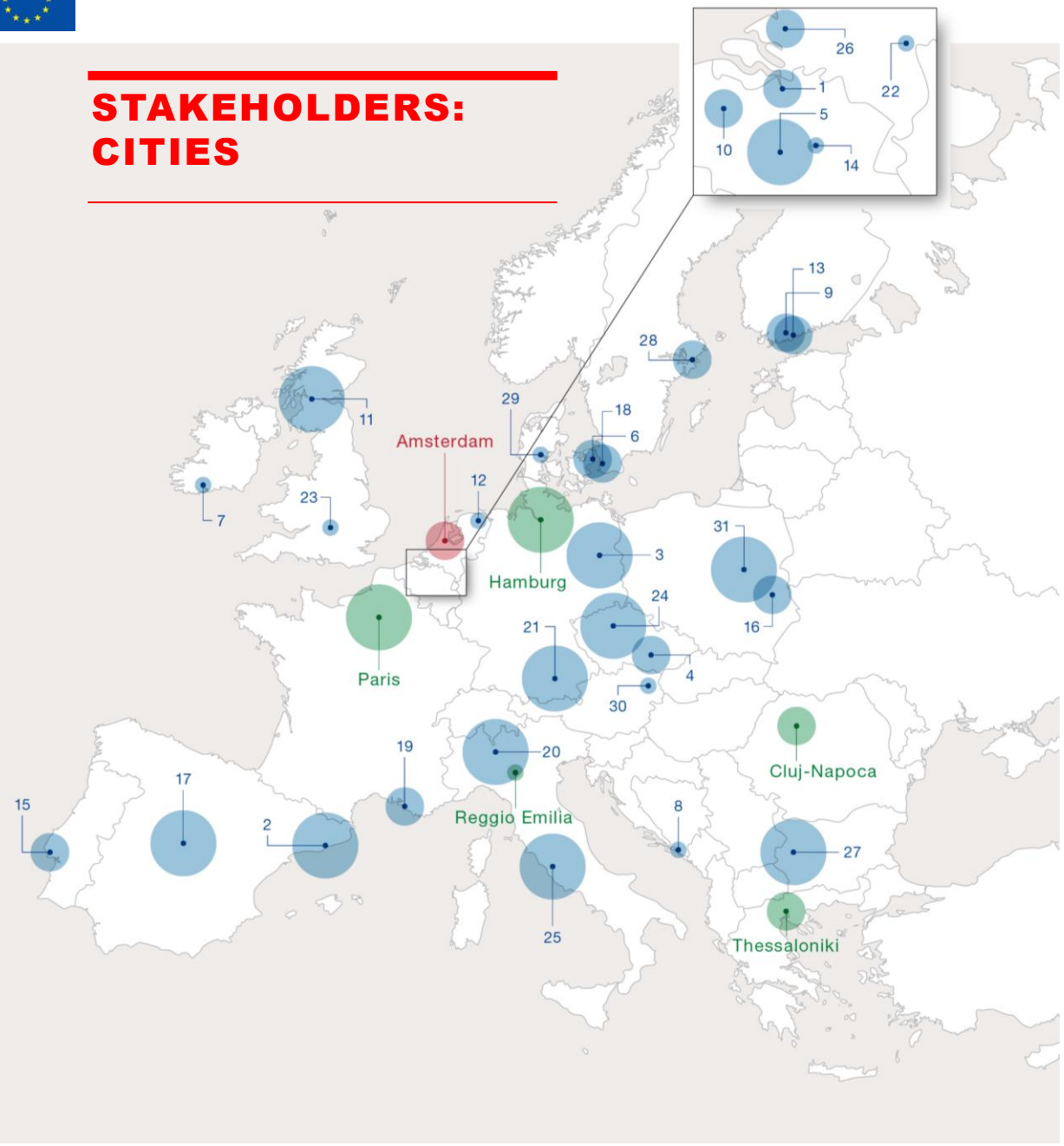
# CITY SCIENCE FOR URBAN CHALLENGES

**Pilot assessment and future potential of the City Science Initiative 2019 – 2020**



Caroline Navejan

# STAKEHOLDERS: CITIES




CITY SIZE BY POPULATION

< 25.000

> 250.000
< 1.000.000

> 1.000.000

**INITIATING CITY**

Amsterdam

**LEADING CITIES**

Reggio Emilia

Cluj-Napoca

Thessaloniki

Hamburg

Paris

**PARTICIPATING CITIES**

7 Cork
8 Dubrovnik
12 Groningen
14 Leuven
22 Nijmegen
23 Oxford
29 Vejle
30 Vienna

1 Antwerp
4 Brno
6 Copenhagen
9 Espoo
10 Gent
13 Helsinki
15 Lisbon
16 Lublin
18 Malmö
19 Marseille

26 Rotterdam
28 Stockholm

2 Barcelona
3 Berlin
5 Brussels
11 Glasgow
17 Madrid
20 Milan
21 Munich
24 Prague
25 Rome
27 Sofia
31 Warsaw

## STAKEHOLDERS: NETWORK

EUROCITIES

100 Resilient Cities

Covenant of Mayors

European Network of Living Labs (ENoLL)

European Regions Research and Innovation Network (ERRIN)

European Union Knowledge Network (EUKN)

UN Global Sustainability Index Institute Foundation (UNGSII)

ICLEI

International Urban Cooperation

JPI Urban Europe

ThinkNature

UNICA: Network of Universities from Capitals of Europe

URBACT

## STAKEHOLDERS: EUROPEAN COMMISSION

JRC

DG Research & Innovation

DG REGIO

DG CLIMA

DG CNECT

DG ENER

DG ENV

DG GROW

DG MOVE

EASME

# CSI PILOT TIMELINE

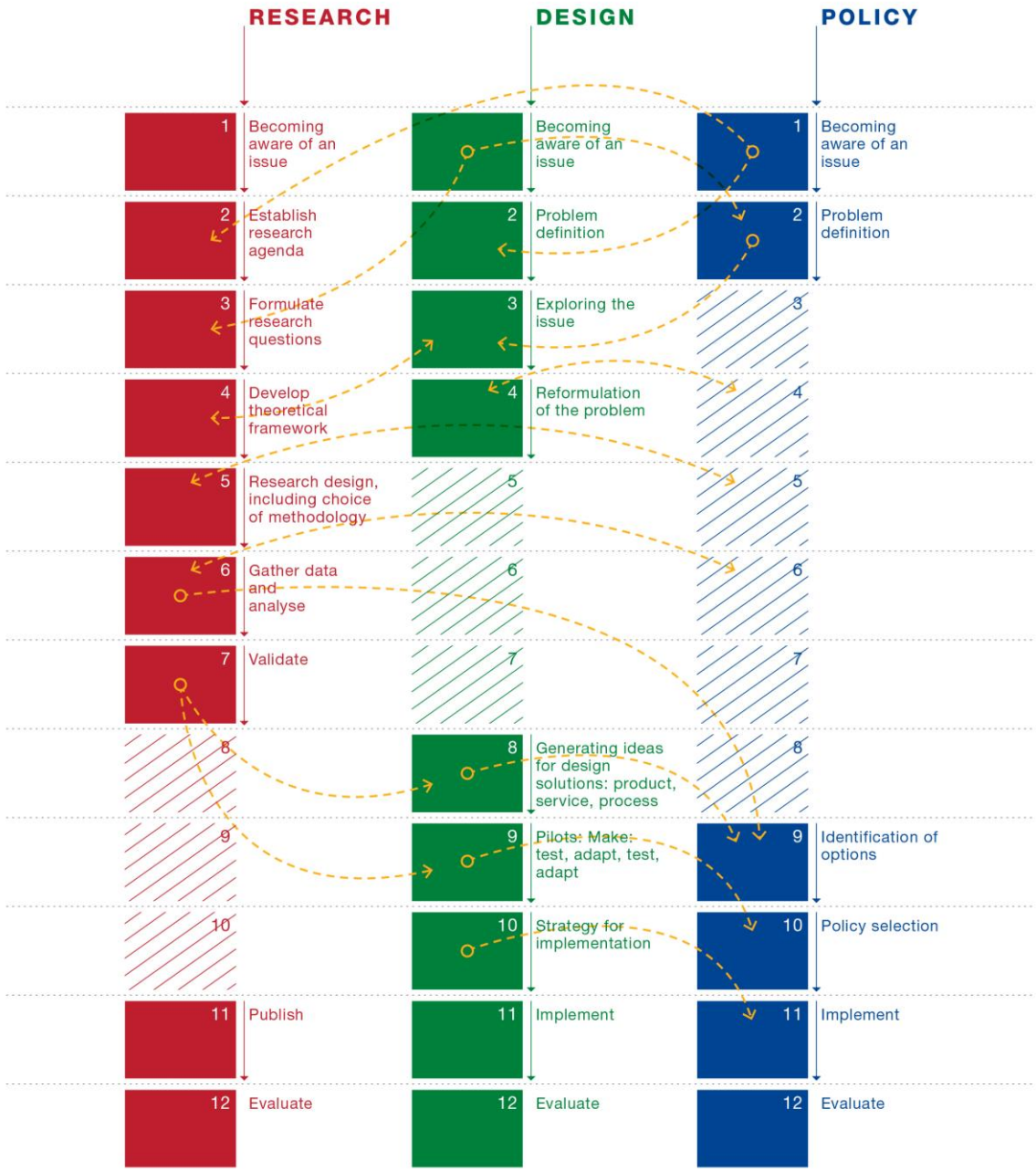
| When | What | Where |
|---|---|---|
| 2018 | | |
| 20 June | Taxi ride | Amsterdam |
| 10–11 October | Meeting CSO, JRC and R&I | Brussels |
| 2019 | | |
| 21–22 February | **First** CSI conference | Brussels |
| 11–12 June | **Second** CSI conference | Amsterdam |
| 24 September | Meeting CSO, JRC and R&I | Brussels |
| 24–25 September | **Third** CSI conference | Brussels |

| When | What | Where |
|---|---|---|
| 2020 | | |
| March | *COVID crisis hits Europe, planned workshops cancelled* | |
| 25 May | **Thematic workshop** Circular economy | Online: Hamburg |
| 4 June | **Thematic workshop** Sustainable urban mobility | Online: Cluj-Napoca |
| 15 June | **Thematic workshop** Air quality | Online: Paris |
| 22 June | **Thematic workshop** Tech and the city | Online: Reggio Emilia |
| 24 June | **Thematic workshop** Mental health | Online: Thessaloniki |
| September | **Launch of CSI report** | |

## CITY SCIENCE

- Challenge based
- The city as complex system
- Integral nature of challenges
- Different kinds of knowledge for solutions
- Transdisciplinary in research questions
- Design contributing to the science-policy interaction
- Cities acquire data professionally
- Universities develop international reviewed methodologies
- Every step in research process is influenced by complexity of city challenges

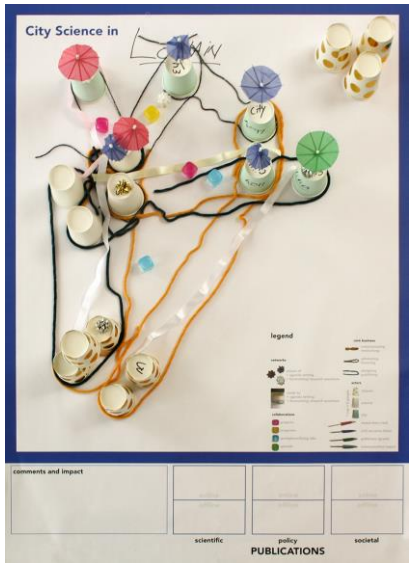
# CITY SCIENCE DYNAMICS



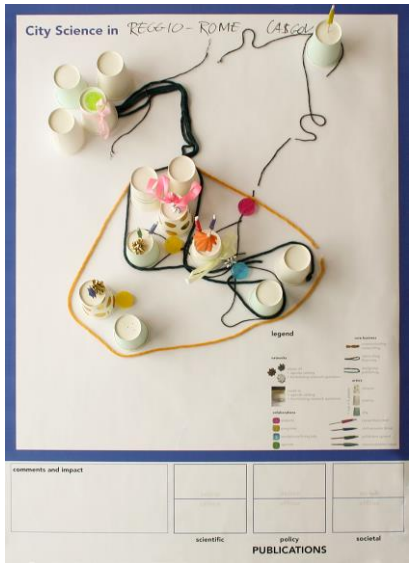
# MAPPING CITY SCIENCE PRACTICES


Warsaw

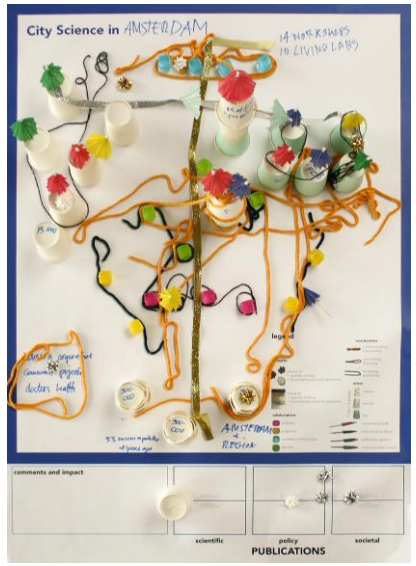

Cluj-Napoca




Lublin




Reggio Emilia




Amsterdam

## CITY SCIENCE ISSUES

- Governance and finance of City Science
- Learning and communication between science and policy
- A need for a new research paradigm on City Science
- Need for data exchange
- Agency of city

# THEMATIC WORKSHOPS

**CIRCULAR ECONOMY**
Hamburg

**SUSTAINABLE URBAN MOBILITY**
Cluj-Napoca

**AIR QUALITY**
Paris

**TECH AND THE CITY**
Reggio Emilia

**MENTAL HEALTH**
Thessaloniki

## CSI ASKS TO:

- Improve the relevancy of European research for city challenges
- Give more support in translating the findings of European research into applicable solutions
- Improve the uptake of research on the local level
- Solve the lack of access to data is seriously impacting the possibility to make fact-based policies
- Make stronger supporting instruments to improve cooperation between cities themselves, universities and the Commission

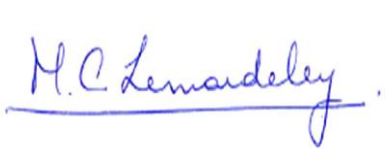
## CSI POTENTIAL:

- CSI is a communication environment for EU research results
- CSI is a learning environment for City Science practitioners
- CSI is a sounding board for networks, JRC and EU DG's
- CSI is a catalyst for generating challenge based research questions and designs
- CSI is a bridge to transdisciplinary urban research between different DG's in addressing city challenges
- CSI is a manifestation in cities of European way of life to which evidence based policymaking is core

## LETTER FROM MAYORS

Given the societal urgency to find innovative approaches and solutions to the challenges European citizens will face in the coming years, we believe that there is a need to continue the City Science Initiative as a learning platform for urban research.

We can assure you that our cities stand ready to support the next phase of the CSI.



Marie-Christine Lemardeley
*Deputy Mayor of Paris*

Emil Boc
*Mayor of Cluj-Napoca*

Konstantinos Zervas
*Mayor of Thessaloniki*

Luca Vecchi
*Mayor of Reggio Emilia*

Almut Möller
*State Secretary of Hamburg*

Femke Halsema
*Mayor of Amsterdam*

Amsterdam
Antwerp
Barcelona
Berlin
Brno
Brussels
Cluj-Napoca
Copenhagen
Cork
Dubrovnik
Espoo
Gent
Glasgow
Groningen
Hamburg
Helsinki
Leuven
Lisbon
Lublin
Madrid
Malmö
Marseille
Milan
Munich
Nijmegen
Oxford
Paris
Prague
Reggio Emilia
Rome
Rotterdam
Sofia
Stockholm
Thessaloniki
Vejle
Vienna
Warsaw

*Thank you*

For more information:
Roel Raterink
r.raterink@amsterdam.nl

Report download:
https://openresearch.amsterdam/nl/page/63027/city-science-for-urban-challenges

# Societal Impact from Research – a UK perspective

Sam Cole – Head of REF Futures (Policy and Delivery)

*University of Warwick*
*Coventry, England*

6th November 2020

## Contents

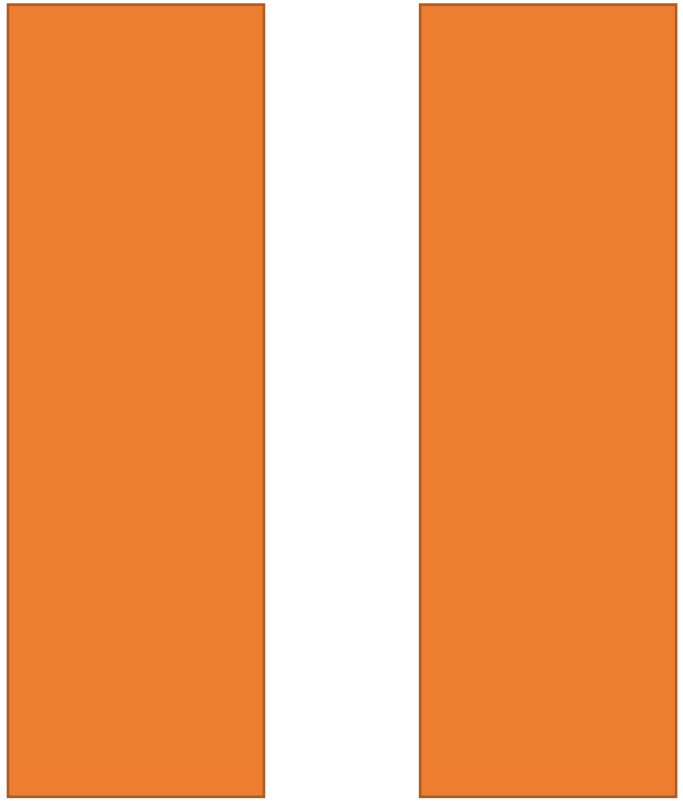
# Overview of the Research Excellence Framework (REF) – What is it for?

- Assesses UK HEIs' research quality. The exercise first began in 1986, known as the Research Assessment Exercise (RAE) before changing to REF in 2014.
- The outcome of the assessment is then used to:
  - Inform the allocation of quality-related (QR) recurrent research funding. Each year Research England distributes over £1bn to UK HEIs. In 2018/19 Warwick received £35,593,680.
  - Provide accountability for public investment in research and demonstrate evidence of the benefits of this investment.
  - Provide benchmarking information and establish reputational yardsticks, for use within the HE sector and for public information.

# UK Research Funding – ‘Dual Support’

## Research Councils

Specific research projects and programmes funded by research councils (BBRSC, EPSRC etc.) through open competition.



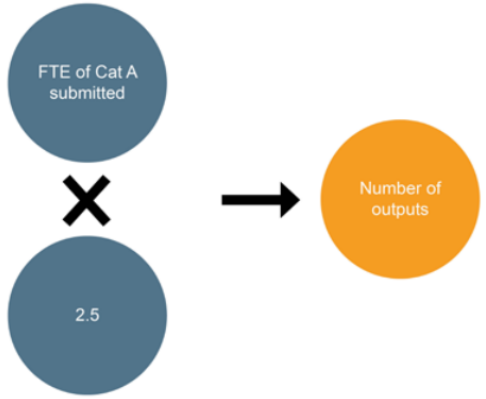
## Recurrent research grant (QR)

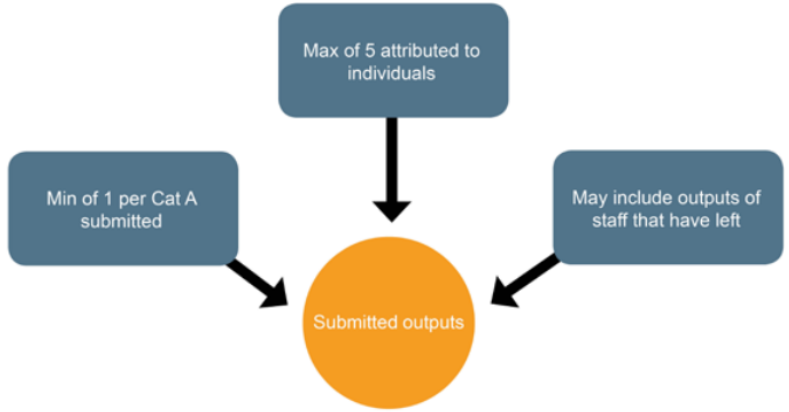
An annual grant distributed to UK HEIs which is based on research quality, staff volume and relative cost of different disciplines.

The REF is used to determine the quality level and staff volumes in different disciplines.

# Components of the REF (what is assessed?)

- **Outputs** – 60% - ‘originality, significance and rigour’
  - 2.5 outputs per FTE of CAT A submitted staff
  - 1-5 outputs per individual staff member (minimum of one each)
- **Impact** – 25%  - ‘reach and significance’
  - Assessed through case studies. Number based on FTE of submitted staff
- **Environment** – 15% - ‘vitality and sustainability’
  - Institutional and unit level narratives combined with research income, research income-in-kind and PhD awards.



# Category A Eligible Staff

- Academic staff with a contract of 0.2 FTE or greater
- On the payroll on the census date – **31 July 2020**
- Primary employment function is to undertake either “research only” or “teaching and research”
- Substantive connection to the submitting unit
- Meeting the definition of independent researcher

# Independent Researchers:

An individual  who undertakes self-directed research, rather than carrying out another individual's research programme.

**Possible indicators:**

- leading or acting as principal investigator or equivalent on an externally funded research project
- holding an independently won, competitively awarded fellowship where research independence is a requirement.
- leading a research group or a substantial or specialised work package.
- Being named as a Co-I on an externally funded research grant/award.
- Having significant input into the design, conduct and interpretation of the research.

# Defining Impact and REF's role in driving impact

- Introduced for REF 2014 to protect the HE sector in light of increasing scrutiny of how public money is spent.
- Met significant opposition when initially proposed but is now widely accepted as a useful and accessible account of the significant impact UK research has on the wider world.

# Defining Impact and REF's role in driving impact

WARWICK
THE UNIVERSITY OF WARWICK

- Impact, based upon research excellence (applied; user-engaged and basic), is the identifiable and evidenced contribution made by Universities to the economy and society. These benefits are broad and diverse and can be experienced in a myriad of different contexts. They include the diversity of ways in which research-derived knowledge and skills benefit individuals, organisations (public, private and "third sector" and nation states through:
- Enhancing the economic competitiveness of the United Kingdom and global economic performance;
- Improving and enhancing the effective delivery of public services and policy development;
- Improving quality of life; health and wellbeing and creativity.

# Examples of Impact – Quantitative/Linear/Diffuse

WARWICK
THE UNIVERSITY OF WARWICK

- **4* 2014 impact case study from Laura Green for Agriculture**

  Footrot (FR) causes 90% of lameness in sheep. FR reduces productivity and lowers welfare. Warwick research has led to the development of a novel management strategy: prompt antibiotic treatment (PAT) - sheep treated with antibiotics within three days of becoming lame with FR. This has resulted in a reduction in the overall prevalence of lameness in sheep flocks in England from 10% (2004) to 5% (2011) and 3% (2013).

- **4* 2014 impact case study from Geoff Lindsay for Education**

  Research into children with speech, language and communication needs (SLCN) has had impact by influencing government policy and legislation, improving provision for children and their parents, providing resources and support for voluntary organisations, and assisting local authorities and trusts in the management of SLCN services. The research informed the 2008 Bercow Review of Provision for Children with SLCN, which in turn led to the Department for Education (DfE) Better Communication Action Plan for improving educational provision.

# Challenges and Practicalities of Developing Impact

WARWICK
THE UNIVERSITY OF WARWICK

- Beyond the key practicalities of what has actually changed for the beneficiary, we need to go back further.

- Warwick discovered two key things during the preparations for REF 2014.

  i) Huge volume of impact across sciences, public policy, arts and culture which has been ongoing for a very long time

  ii) Too reliant on institutional memory for the discovery of that impact

  iii) Information not held systematically; much impact was never documented or recorded or even knowledge lost as researchers depart or relationships lapse

# Developing an integrated, comprehensive research support environment

WARWICK
THE UNIVERSITY OF WARWICK

**Systems** for recording impact (WICS)

**Funding support** mechanisms (national & local)

**Developing partnerships**

**Support services for researchers**

**Systems** for recording impact (WICS)

- Ongoing recording of impact from the inception of research award or project
- Repository to gather evidence; document impact; record testimony at the time the impact took place etc.

**Funding support** mechanisms (national & local)

- Research Council Impact Accelerator Accounts (BBSRC, EPSRC, ESRC etc.) – awards for evolving impact and developing partnerships with non-academic stakeholders
- Fellowships
- Warwick Impact Fund
- Warwick Brussels Office
- Translational Partnerships

- Happens in many diffuse and diverse ways particularly between individual researchers and companies, cultural organisations, hospitals etc. through normal research
- Knowledge Transfer Partnerships (KTPs) as part of Innovate UK
- Both local to national
- Company – University –Associate
- Offer many benefits to all three

**Developing partnerships**

WARWICK
THE UNIVERSITY OF WARWICK

Warwick currently has 11 KTPs

Ranplan WIRELESS

SIEMENS

MASONS EST 1803

w.h.tildesley ltd
Forging Specialists

Slicker Recycling

AstraZeneca

**Support services for researchers**

**Research and Impact Services**

- REF Planning
- Dedicated Research Impact team
- Pre-award support
- Research Governance and Ethics team
- Research systems

**Warwick Scientific Services**

- Help companies specific technical issues in their business
- Improve their performance
- Increase competitiveness

**Warwick Ventures**

- Commercialises innovations from world leading research
- Advise the university's research innovators
- Close relationship with industry

WARWICK
THE UNIVERSITY OF WARWICK

**Systems** for recording impact (WICS)

**Funding support** mechanisms (national & local)

**Developing partnerships**

**Support services for researchers**

All these features of our research environment help to drive and develop impact in the real world but success usually means we must be partners in this process from the outset.

# Global Research Priorities

WARWICK
THE UNIVERSITY OF WARWICK










UNIWERSYTET EKONOMICZNY W KRAKOWIE

# UNIWERSYTET EKONOMICZNY W KRAKOWIE

RERUM COGNOSCERE CAUSAS ET VALOREM

# How to identify and optimise societal impact in regional innovation systems fostering competition and connectivity on the Regional and Municipal Level?

***inspirations from Poland…***

**Krzysztof Głuc, Cracow University of Economics**

# Regional innovation systems crucial elements

There are three necessary elements that constitute what can be called a *regional innovation system*:

- Companies
- Research and education institutions
- Public authorities

# The reality of regional vs. municipal level

- Companies (regional level):
  - all possible types
  - all possible sizes
  - usually numerous sectors, profiles, etc.
  - all possible needs
  - often foreign impact
- Companies (municipal level):
  - usually different types
  - in many cases only SMEs
  - sometimes mono-profiled
  - needs limited

# The reality of regional vs. municipal level

- Research and education institutions (regional level)
  - all possible types
  - all possible sizes
  - usually numerous profiles, specializations, etc.
  - all possible needs
  - often international experience

- Research and education institutions (municipal level)
  - often limited to elementary and secondary level
  - often limited size
  - no research institutions
  - limited external experience

# The reality of regional vs. municipal level

- Public authorities (regional level)
  - self-governmental
  - fairly large
  - specialized departments
  - big budgets
  - various needs
  - often international experience
- Public authorities (municipal level)
  - self-governmental
  - often small
  - small budgets
  - needs limited

## Societal impact…

- Naturally, societal impact is stronger (easier to mobilize and organize) on a local level
- A paradox – limited options for accelerating innovations on a local level and stronger potential for building social support

# Where is innovation born?

- In every generation approx. 2% are geniuses and 10 % are super-gifted
- It is important not to loose what we naturally have
  - strong schools
  - conscious pro-innovation policy on a local level
  - transmission from regional to local level and from local to regional
  - convincing citizens on a strategic approach to innovativeness

## Questions and dilemmas

- Can we grow „science” on a local level?
- How to convince local leaders that innovative economy begins in kindergarten? Who – locally – can help?
- „Decentralization” of science – how effectively we can build strong relationships between the world of research and innovation and local level?
- Strengthening innovation in SMEs – dreams vs. reality

# Thank you!

**Krzysztof Głuc**
krzysztof.gluc@uek.krakow.pl

# Up Next

| | |
|---|---|
| 12.30-13.00 | Break |
| 13.00-15.00 | Closing Panel: "Recommendations for the Polish science system, and beyond" |