



PMMP



CITIZEN SCIENCE | GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



ipcc

INTERGOVERNMENTAL PANEL ON climate change

Debra Roberts, Co-Chair of IPCC Working Group II.

**“The next few years are probably the most important in our history”**

Panmao Zhai, Co-Chair of IPCC Group I.

**“We are already seeing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice”**

**IPPC Press Release 8<sup>th</sup> October 2018**



Wilson Center



GCEOA



PMMP

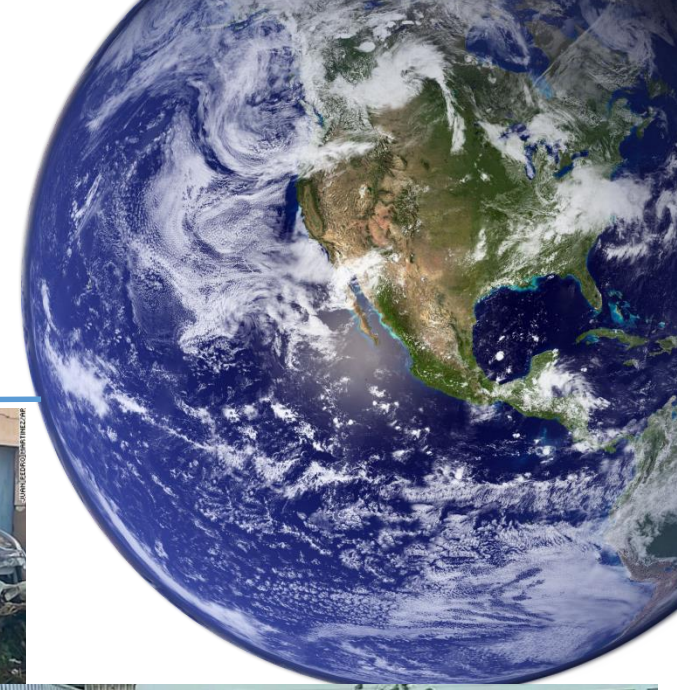


CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



10<sup>th</sup> October 2018

Deadly flash floods hit Majorca



11<sup>th</sup> Oct, 2018 - USA Hurricane Michael slammed ashore as a Category 4, the strongest ever to hit the Florida Panhandle



12<sup>th</sup> October

Storm Callum: Rain bomb causes 'worst flooding in 30 years' in Wales

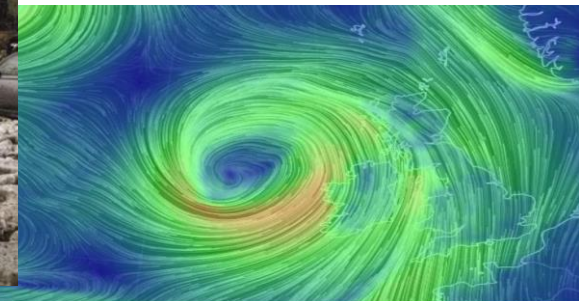


14<sup>th</sup> October 2018 - Hurricane hits Portugal  
Only the fifth time recorded that an Atlantic hurricane has reached the Iberian peninsula.



15<sup>th</sup> October – Flash flood kills 10 in the South West of France

23<sup>rd</sup> October Freck Storm hits Rome–Hail & Ice





PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



oui  
nide  
iou

WE NEED YOU



Nós precisamos de você



Wilson Center



GCEOA



PMMP

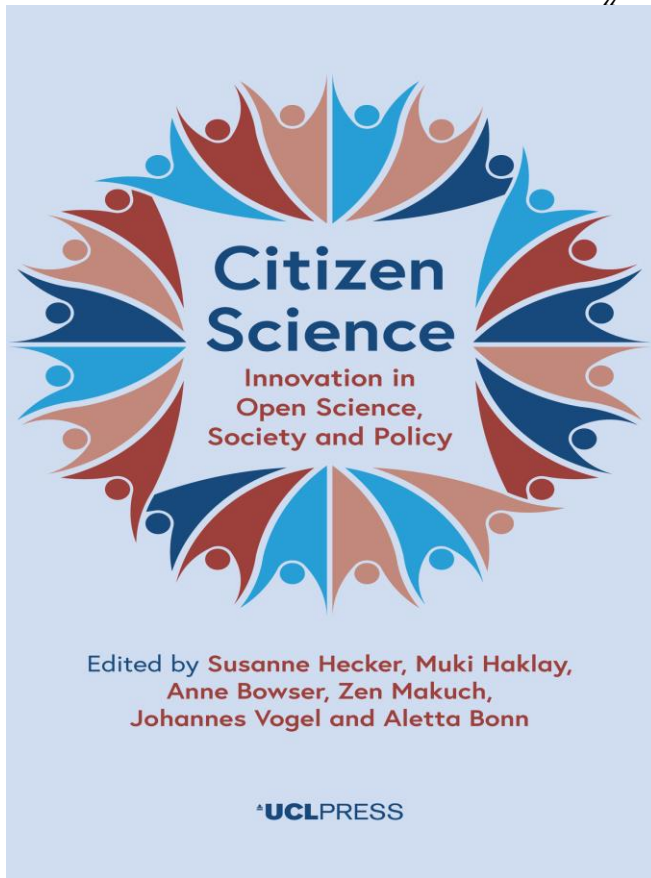


CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



## CHAPTER - 16

Citizen science for policy formulation and implementation.

Susana Nascimento<sup>1</sup>, Jose Miguel Rubio Iglesias<sup>2</sup>, Roger Owen<sup>3</sup>, Sven Schade<sup>4</sup> and Lea Shanley<sup>5</sup>



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



Be Different.  
Stay Ahead.  
Be A First Mover

BE A CITIZEN SCIENTIST

BE ONE OF THE BILLION TO TAKE PART

- CITIZEN SCIENCE IS CHEAPER
- CITIZEN SCIENCE IS QUICKER
- CITIZEN SCIENCE IS MORE AGILE
- CITIZEN SCIENCE IS ACCURATE
- CITIZEN SCIENCE IS THE FUTURE



Wilson Center



GCEOA



PMMP

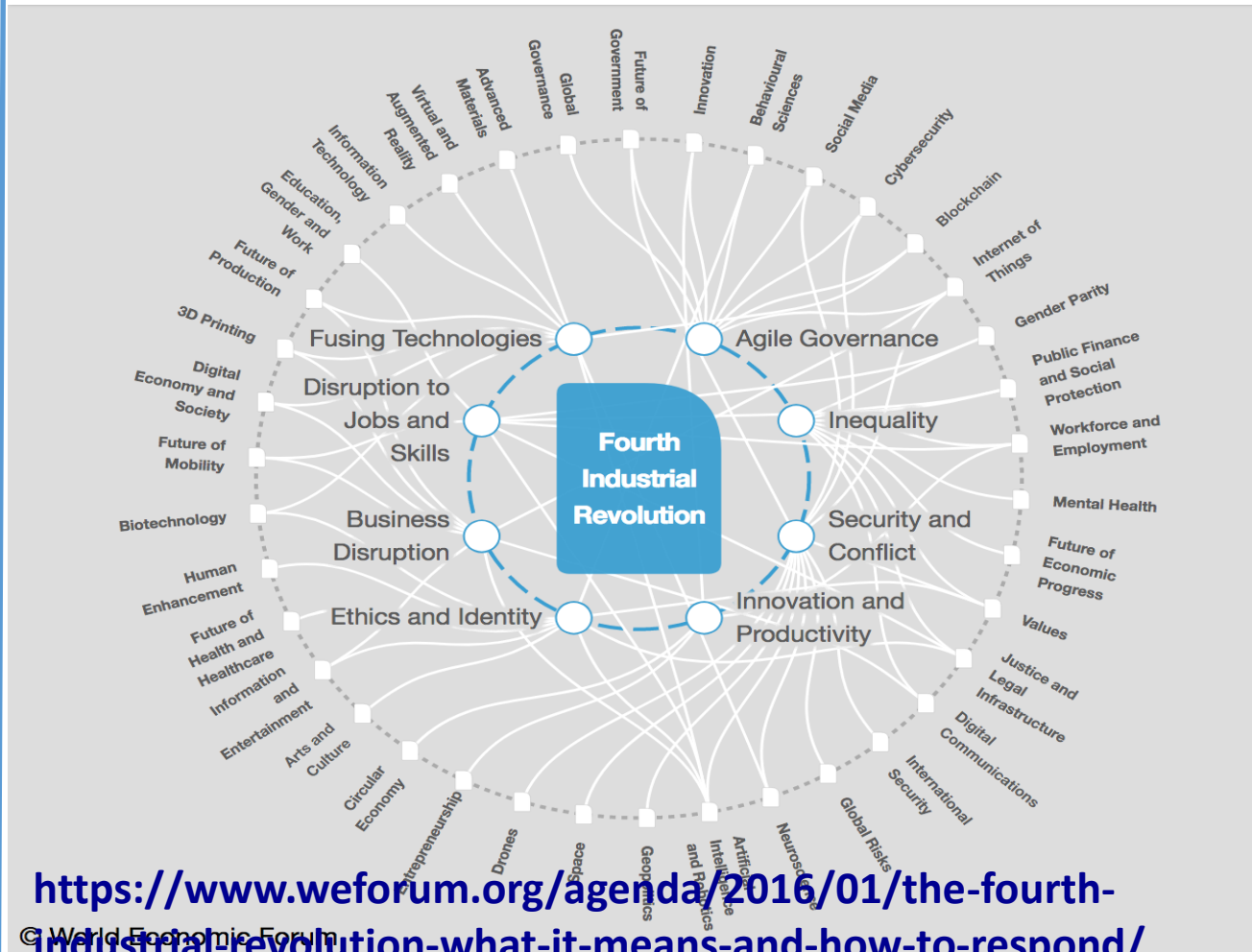


# CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS  
UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another.

In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.

<https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>

© World Economic Forum



Wilson Center



PMMP

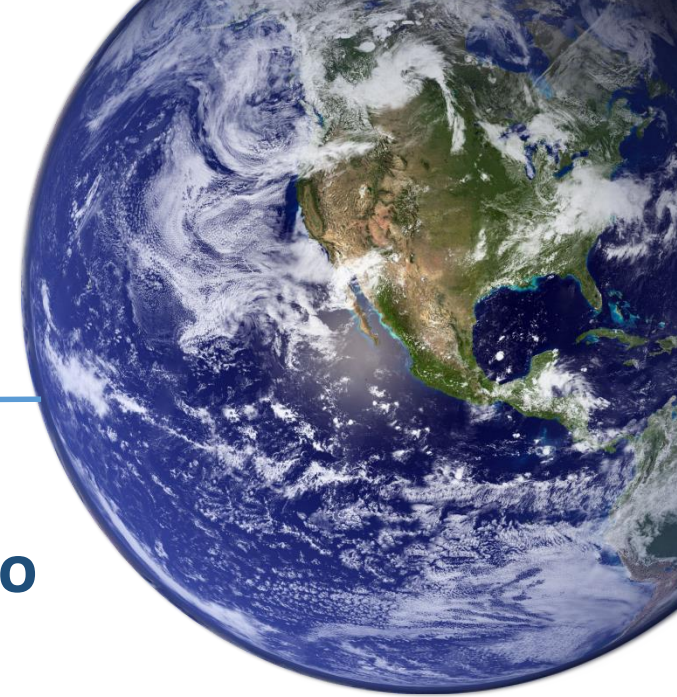


CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



“  
The speed of current breakthroughs has no historical precedent (WEF)

The possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are unlimited (WEF).

It is why Citizen Science is the future (MSB)



Wilson Center



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



## Key Foundational Goals

Network and support consortia of citizen science projects conducting similar research, helping local projects share effective practices and exchange or aggregate data.

### DEVELOP GLOBAL PROGRAMMES

DO IT ONCE, DO IT RIGHT, DO IT WITH THE SAME TOOLS, DO IT WITH THE SAME APPS  
DO IT WITH THE SAME DATA BASE SYSTEMS, DO IT LOCAL MAKE IT GLOBAL, DO IT WITH UNEP

DEVELOP COMMON BUSINESS MODELS THAT WORK AT THE GLOBAL SCALE





Wilson Center



GCEOA



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



## GLOBAL MOSQUITO ALERT CONSORTIUM



### PARTNERS

The Wilson Center - Science & Technology  
The United Nations Environment Program  
The European Citizen Science Association  
The Globe Observer Mosquito Health Mapper  
The Invasive Mosquito Project.  
Muggenradar.  
Mosquito Alert.  
ZanzaMapp.  
MosquitoWEB.  
CitizenScience.Asia.



Wilson Center



GCEOA



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna

MOSQUITO ALERT

## MOSQUITO BORNE DISEASES: A GLOBAL ENVIRONMENTAL AND HEALTH PROBLEM THAT NEEDS TO INVOLVE SOCIETY

- Managers need information from citizen
- Citizens seek short term public solutions



© Roger Eritja



ASPB



ASPB



Wilson Center



GCEOA



PMMP



# CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS  
UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



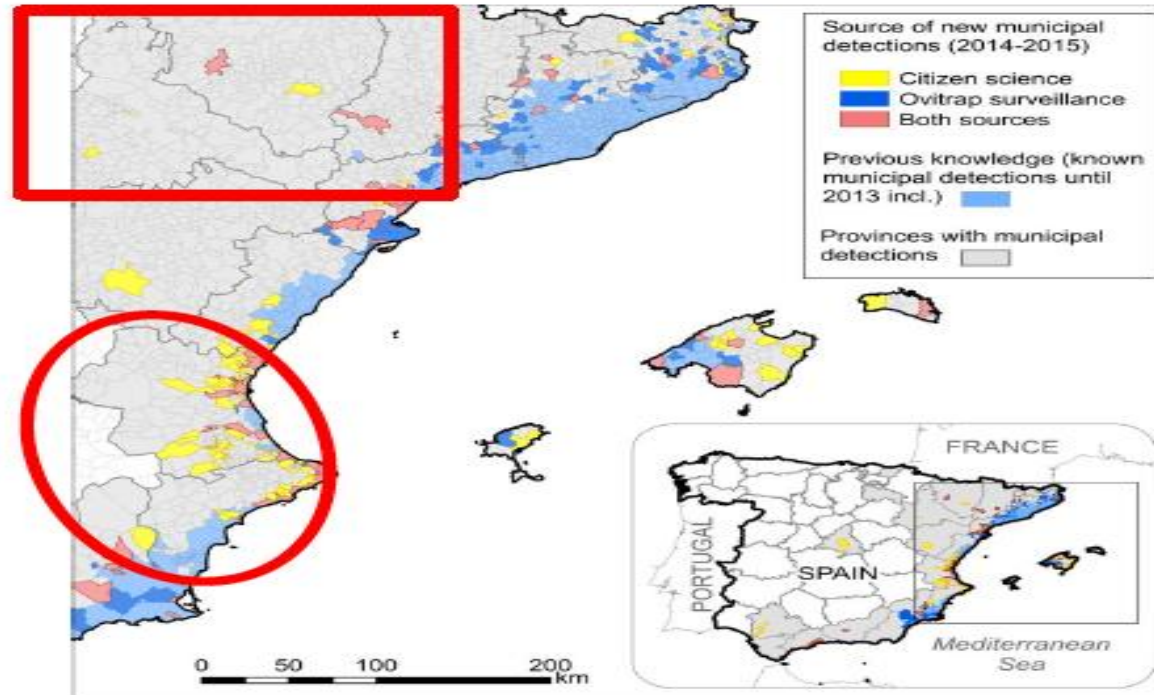
MOSQUITO ALERT

### JOINING EFFORTS IN SURVEILLANCE: NEW DISCOVERIES

2014-2015

Far from expansion range

Filling surveillance gaps





Wilson Center



GCEOA



PMMP



# CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS  
UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



### Muggenradar, Netherlands

#### Power of citizen science

Professional science alone cannot provide information at the scales and resolutions necessary to understand environmental change.

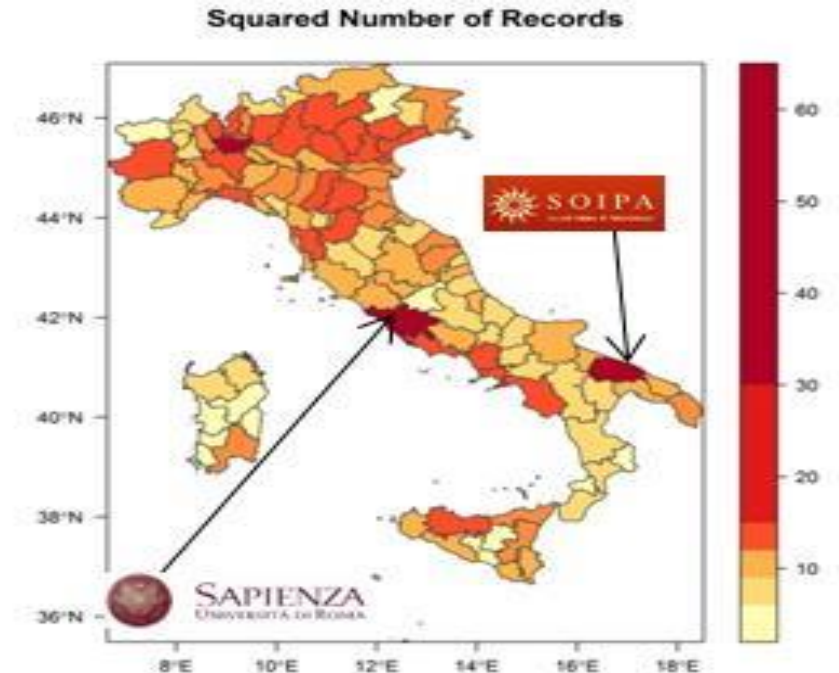
The dominant culture of science rarely accounts for different ways of knowing, and often fails to engage the public.



www.tekenradar.nl



### Zanzamapp, Italy





PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



GLOBAL MOSQUITO ALERT

October 2015 – A Beginning – ECSA & Wilson Center establish a joint task force to coordinate citizen science monitoring of disease carrying mosquitos (MTFG)

September 2016 – First recognition – UN Support offered for MTFG workshop at UNEP

April 2017 – MTFG workshop establishes Global Mosquito Alert Consortium (GMAC) – UN request for first Global Citizen Science Delegation to attend advance meeting to UNEA3

2018 BUSINESS PLAN FOR ROLL OUT

April 2018 WORKSHOP RESULTS PUBLISHED ON BEHALF OF THE CONSORTIUM BY THE WILSON CENTRE

2019 Mosquito Alert Pakistan <https://maa.nih.org.pk>



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



# NIH Mosquito Alert Pakistan

Collect information on disease vector mosquitoes to assist research, surveillance and control and to promote awareness raising.



Download the app and warn if you see a tiger or yellow fever mosquitoes



or explore the map to see real-time findings from around the world

DOWNLOAD APP

<https://maa.nih.org.pk>

National Institute of Health (NIH) Park Road, Chak Shahzad, Islamabad, Pakistan



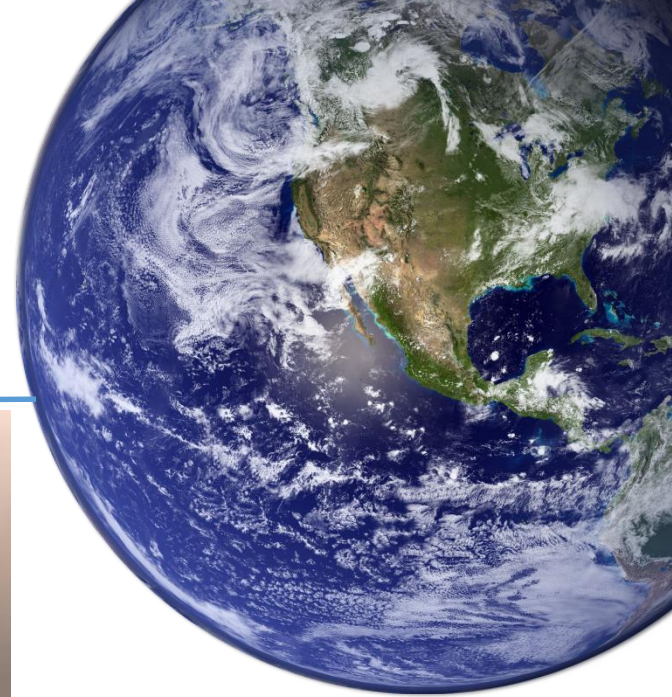
PMMP



CITIZEN SCIENCE | GLOBAL PARTNERSHIP



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



Elizabeth Tyson, Anne Bowser, John Palmer, Durrell Kapan, Frederic Bartumeus, Martin Brocklehurst, Eleonore Pauwels

CITIZEN SCIENCE

# Global Mosquito Alert: Building Citizen Science Capacity for Surveillance and Control of Disease-Vector Mosquitoes

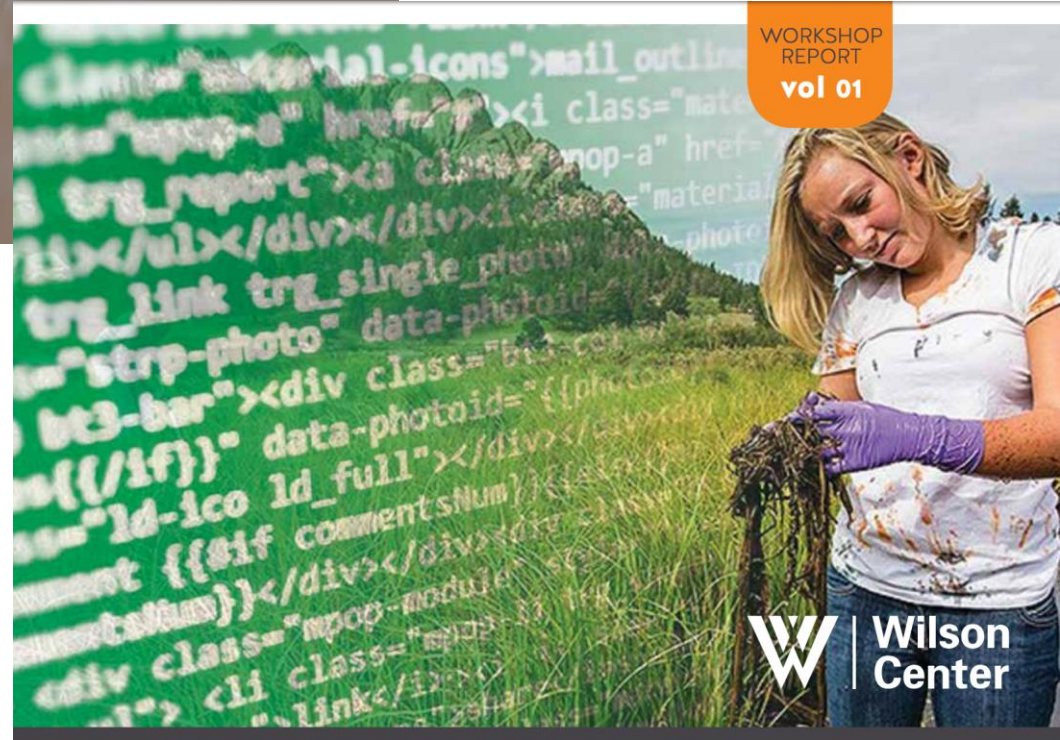
Apr 20, 2018

## Authors

Anne Bowser  
Peter Brenton  
Rob Stevenson  
Greg Newman  
Sven Schade  
Lucy Bastin  
Alison Parker  
Jessie Oliver

# Citizen Science Association Data & Metadata Working Group:

## Report from CSA 2017 and Future Outlook



WORKSHOP REPORT  
vol 01





Wilson Center



GCEOA



PMMP



# CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



### Unlocking the power of citizen science

Filip Meysman and Huib Huyse



1

# Build on Air Quality monitoring Flanders – 5% of population Engaged – Up to 50,000 people







Wilson Center



GCEOA



PMMP

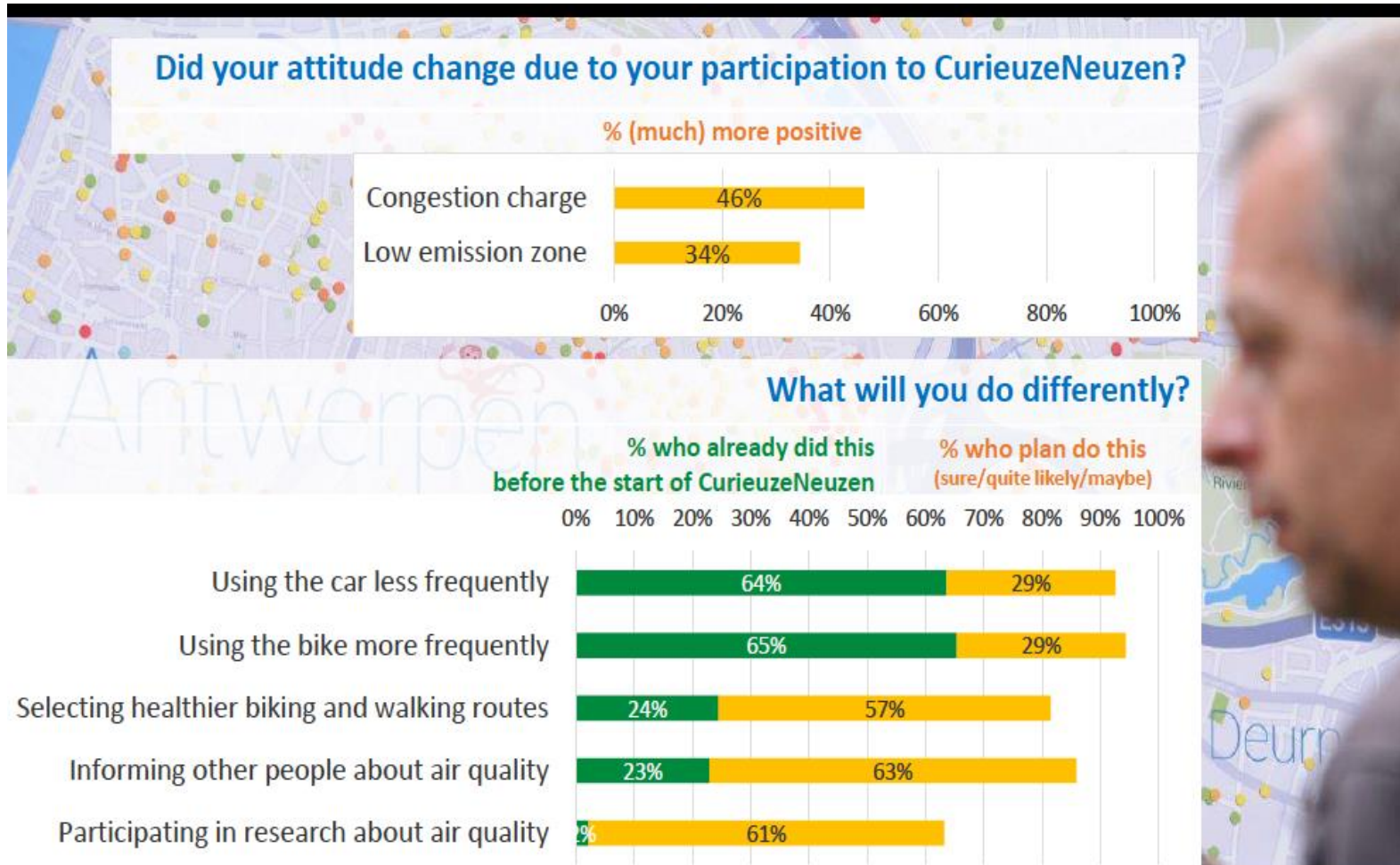
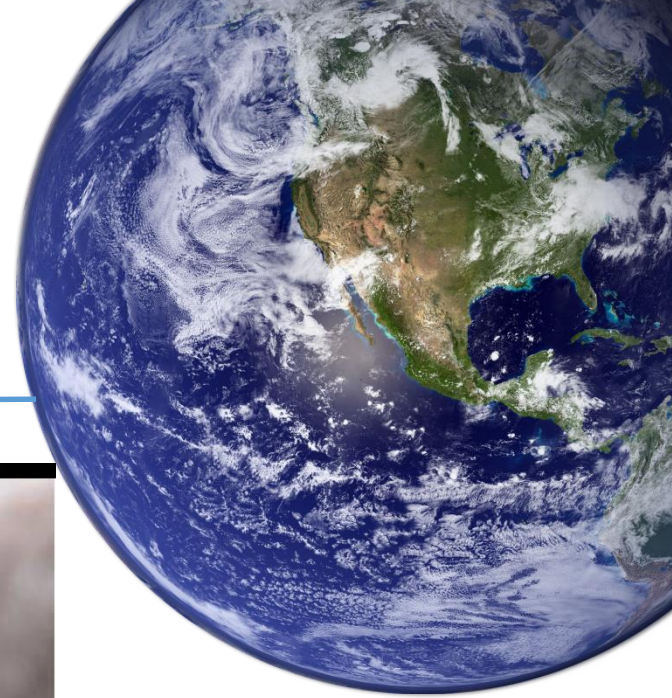


# CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS  
UNCTAD

## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna





Wilson Center



GCEOA



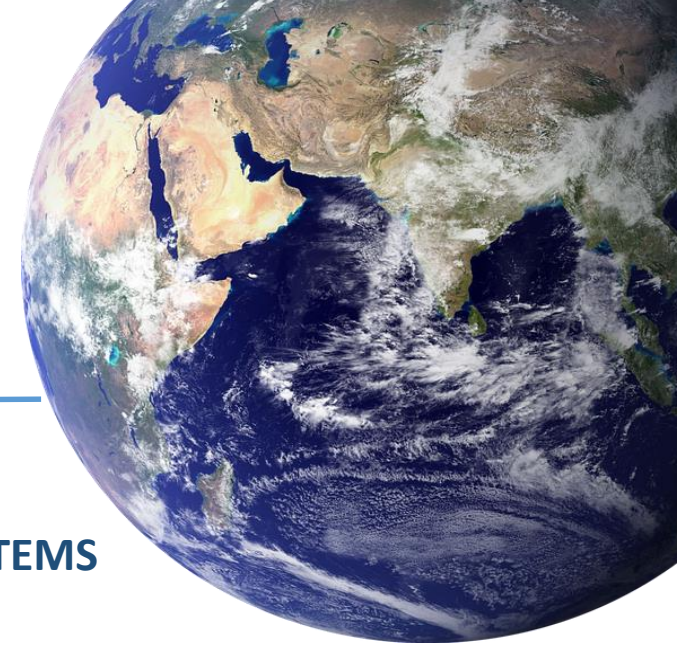
PMMP



CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD



United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna

**WE ARE TAKING CITIZEN SCIENCE PROGRAMMES TO THE GLOBAL STAGE**

“

**WE ARE WORKING WITH CUSTODIANS TO IDENTIFY COMMON GLOBAL SYSTEMS**

**WE ARE DEVELOPING OPEN ACCESS TOOLS AND META DATA BASE PROTOCOLS & STANDARDS**

**WE NEED TO EXPERIMENT WITH BUSINESS MODELS THAT WILL FUND GLOBAL ROLL OUT**

**IT IS TIME FOR : BUSINESS & COMMERCIAL PARTNERS TO GET INVOLVED TO SHARE COST AND BENEFITS**

**PUBLIC SECTOR PARTNERS TO WORK LONG TERM WITH THE PROGRAMMES**

**PRIVATE FOUNDATIONS TO STEP UP & PROVIDE LONG TERM SUPPORT**

**OR: WE WILL BE BOLD AND SECURE CROWD BASED FUNDING SOLUTION**

**THIS IS HAPPENING – BE PART OF IT**



Wilson Center



PMMP



CITIZEN SCIENCE | GLOBAL PARTNERSHIP



## United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



### We call on the UN to recognise that:

- Citizen Science continues its spectacular growth;
- A legal framework is emerging to support Citizen Science with supporting legislation (the Crowd Sourcing and Citizen Science Act 2015) in place in the US
- Government agencies in the US, EU and Australia are putting Citizen Science strategies in place; and that such strategies “herald a new era of public participation in science by developing collaborative projects that support decision-making and are engaging the public.”

New South Wales Government 2018

### We call on the UN:

- to put in place an institutional framework that will embed Citizen Science into all relevant areas of UN activities and enable the global citizen science community to bring Citizen Science into the scope of Official Statistics and SDG reporting and decision making processes



Wilson Center



GCEOA



PMMP



CITIZEN SCIENCE GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



“  
Nós precisamos de você



THANK YOU

[Martin.brocklehurst@me.com](mailto:Martin.brocklehurst@me.com)

PUBLIC, BUSINESS AND COMMERCIAL PARTNERS  
CAN YOU AFFORD NOT TO BE INVOLVED





Wilson Center



GCEOA



PMMP



CITIZEN SCIENCE | GLOBAL PARTNERSHIP



UNITED NATIONS UNCTAD

United Nations Commission on Science & Technology For Development – Inter-sessional panel 15-17 January 2019 Vienna



“