



Science for cities in transition

Outputs of the RAMSES project

FP7 Project Grant Agreement n° 308497



Introduction and context

RAMSES is a European research project aiming at developing methods that can operationalize adaptation in European and other cities. It is an interdisciplinary project including the topics of adaptation, mitigation, climate change impacts, economics, architecture, infrastructure, urban and spatial planning, climate modelling, policy and governance, risks, resilience and vulnerability, health, communication.

To scientists from the above domains, RAMSES offers a variety of interesting activities and outputs, which can be divided into the following categories:

1. Reports on research findings and scientific publications
2. Dissemination and Events

Reports on research findings and scientific publications

Being a multi-disciplinary project, RAMSES contributes to the advancement of knowledge in various scientific fields, among others:

- Architecture, infrastructure and urban design;
- Climate adaptation;
- Climate modelling;
- Climate related risks;
- Economics;
- Environmental health economics;
- Policy and adaptation to climate change;
- Urban and climate impact;
- Transition, adaptation and mitigation;
- Urban policy and governance;
- Vulnerability and resilience.

Scientific outputs and related deliverables and articles are listed in the following, identifying also the scientific area.

The order of the listed reports follows the logic of the RAMSES research. For more information, have a look at <http://www.ramses-cities.eu/research/>.

Reports on research findings and scientific publications

Library of impact functions and general uncertainty measures for buildings and infrastructure applicable to urban settlements

Scientific area: Urban and climate impact research

Date of publication: December 2014

Authors: M. Boettle, L. Costa, S. Kriewald, J. P. Kropp, B. F. Prah, and D. Rybski (Potsdam Institute for Climate Impact Research)

Contributing organisations: London School of Economics, University of Newcastle upon Tyne

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The library comprises impact functions for buildings and infrastructure applicable to urban settlements. The classification of the functions is based on the information on infrastructure and building types provided by the “Physical and cost typology for buildings and infrastructure/ project database”, developed in the RAMSES project (see below). The functions can help to identify vulnerable parts of cities in relation to climate impacts. Additionally, an overview of existing impact functions can be used for further research.

Methods inventory for infrastructure assessment and benchmarking

Scientific area: Vulnerability and resilience research

Expected date of publication: January 2016

Organisation in charge: University of Newcastle upon Tyne

Contributing organisations: Potsdam Institute for Climate Impact Research, Seneca Consultants

The inventory will provide methods and tools for the quantitative evaluation of efficiency, vulnerability and resilience of infrastructure. In particular, it will consider infrastructure at different levels from individual assets to networks to systems of systems in order to provide insights about the appropriate scales to address vulnerability and resilience of urban space. The deliverable should provide valuable input for researchers, municipal officers and urban planners alike to reduce the vulnerability of urban infrastructure to climate change impacts.

Library of transition and adaptation functions

Scientific area: Transition, adaptation and mitigation research

Expected date of publication: November 2015

Organisation in charge: Potsdam Institute for Climate Impact Research

The report will complement damage and impact functions with transition functions. Transition functions describe the probability that a city system transgresses from one state to another. These functions will be assembled in a library and could be used to investigate regime shifts of urban systems under the specific influence of climate change impacts, adaptation or mitigation.

Synthesis review on resilient architecture and infrastructure indicators

Scientific area: Urban policy and governance

Date of publication: December 2013

Authors: James Kallaos, Annemie Wyckmans (Norwegian University of Science and Technology) and Gaëll Mainguy (Institut Veolia)

Contributing authors: Ludivine Houssin, Georges Valentis, Floriana F. Ferrara, Bernd Hezel, Ephraim Broschkowski, Astrid Westerlind-Wigström, Rolf André Bohne, Fernanda Pacheco

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The report identifies and analyses resilience frameworks and corresponding indicators that are available to assess architecture and infrastructure resilience today. This state of the art is instrumental to determine:

- the conditions under which architecture and infrastructure resilience can be defined and measured;
- the attributes of appropriate indicators to guide actions and investments; and
- the suitable criteria to select and/or elaborate such indicators.

The deliverable is composed of contributions from research, business, design, planning and standardisation perspectives as well as major EU databases (EEA, ESPON Climate, RESPONSES, EVDAB, URBAN AUDIT).

This input is vital to define the purpose, usability, and suitability of indicators of resilience in general and for the RAMSES project in particular.

Related scientific articles:

Kallaos, J., Mainguy, G., Wyckmans, A., 2014, Considering resilience: steps towards an assessment framework. *Journal of Land Use, Mobility and Environment* 7(1), 5-28 (<http://www.serena.unina.it/index.php/tema/article/view/2290>)

Classification of buildings and infrastructure with respect to different climate related impacts

Title of related report: Physical and cost typology for buildings and infrastructure

Scientific area: Climate related risk community

Date of publication: May 2014

Authors: Juan Acero, Markus Boettle, Luís Costa, Ramana Gudipudi, Anne Holsten, Jürgen P. Kropp, Linda Krummenauer, Maddalen Mendizabal, Mady Olonscheck, Boris Prah, Diego Rybski, Carsten Walther (Potsdam Institute for Climate Impact Research)

To be downloaded at: <http://www.ramses-cities.eu/resources/>

Description of relevant criteria (of buildings and infrastructure) identified in the literature as conditioning the impact severity of climate-related events. The investigated climate threats are: flooding, windstorm and extreme temperatures. Based on the criteria, a building classification with respect to flood and storm impacts are suggested, which can be used for stocktaking of an urban inventory. The criteria review also provides an important input for further urban studies. For the infrastructures Transport, Electricity, Water and Waste Water Systems we have identified the broad infrastructure typologies with respect to multiple impacts. For research this could be used to develop cost categories for the identified infrastructure typologies. In addition it could form the basis for local urban planners while preparing climate proofing in infrastructure planning.

Related scientific articles:

Zhou B, Rybski D, Kropp JP (2013): On the statistics of urban heat island intensity. *Geophysical Research Letters* 40(20), 5486-5491
(<http://onlinelibrary.wiley.com/doi/10.1002/2013GL057320/abstract>)

Prah BF, Rybski D, Kropp JP, Burghoff O, Held H (2012): Applying Stochastic Small-Scale Damage Functions to German Winter Storms. *Geophysical Research Letters*, 39(6): L06806
(<http://onlinelibrary.wiley.com/doi/10.1029/2012GL050961/abstract>)

Resilient Infrastructure and Architecture Indicators

Scientific area: Urban policy and governance

Expected date of publication: June 2015

Organisation in charge: Norwegian University of Science and Technology

A report summarising empirical evidence on measures and indicators of resilient architecture, infrastructure and urban design, gathered from the RAMSES case study cities as well as science- and experience-based literature. For each RAMSES case study city there is a detailed sub-report, analysing and discussing resilience indicators and measures identified in policy documents. For some cities, the findings were elaborated and discussed with decision makers of the corresponding city.

Database on taxonomic resilient architecture and infrastructure indicators

Scientific area: Architecture, infrastructure and urban design

Expected date of publication: June 2015

Organisation in charge: Norwegian University of Science and Technology

A report proposes a taxonomy of measures to increase resilience of architecture, infrastructure and urban design. For each measure a range of characteristics is specified:

- Type of infrastructure;
- Scale of implementation;
- Threat(s) addressed;
- Expected outcomes;
- Performance Indicators;
- Resilience dimensions;
- Scientific references; and
- Reference cities and projects.

The taxonomy is based on empirical evidence gathered in the RAMSES case study cities as well as scientific and experience-based references, as described and analysed in the report “Resilient Infrastructure and Architecture Indicators” which was realised during the RAMSES project (see above). As an introduction to the taxonomy, various entry points and pathways are specified in order to be used by, amongst others, municipal planners, design teams, cost and impact assessment.

High level quantified assessment of key vulnerabilities and priority risks for urban areas in the EU

Scientific area: Climate modellers, the risk analysis community, climate impacts researchers

Expected date of publication: June 2015

Organisation in charge: University of Newcastle upon Tyne, Tecnalía

A detailed report outlining the methodology for conducting a high-level assessment of vulnerabilities in cities, including a description of datasets and models used and informed by an assessment of stakeholder needs. The report will also include the results of the quantified analysis of key vulnerabilities in urban areas and an assessment of the risks faced.

The findings will certainly be of interest to the scientific community as we are developing a transferable methodology for conducting high-level vulnerability assessments in cities. This could be used to apply a similar approach to other hazards or other parts of the world, as well as acting as a basis from which further studies could be conducted.

The spatial datasets (e.g. EU CORDEX outputs, model results, quantified assessment outputs, etc.) generated for this output will also be made available for use by the scientific community.

Extension of the Urban Integrated Assessment Facility (UIAF) including hazards for the first time (pluvial flooding and air quality), allowing new assessments of impacts of future climate scenarios on urban areas

Scientific area: Climate modellers, the risk analysis community, climate impacts researchers

Expected date of publication: September 2015

Organisation in charge: University of Newcastle upon Tyne

The Urban Integrated Assessment Facility (UIAF), an approach to city-scale climate risk analysis and assessing the benefits of adaptation and mitigation, is further developed in this report, including new hazards for the first time (pluvial flooding and air quality), allowing assessments of impacts of future climate scenarios on urban areas. It will be made available in the form of a fully-documented open-source software framework to allow its wide adoption and use within the EU for the integrated assessment of climate risks in urban areas.

This will be of particular use to urban planners and decision-makers, helping them to undertake an integrated assessment of climate vulnerabilities and risks in their cities and incorporate adaptation into their planning processes. The updated UIAF is also interesting for the scientific community, as it will advance the state-of-the-art by advancing the modelling framework as well as including new impacts.

Methodological blueprint for the assessment of indirect impacts to the economy and infrastructure from climate change

Scientific area: Climate modellers, the risk analysis community, climate impacts researchers

Expected date of publication: September 2016

Organisation in charge: University of Newcastle upon Tyne

In conjunction with the work on adaptation costs a blueprint report will be produced outlining the methodology developed in RAMSES for the assessment of indirect impacts from climate change on the urban economy and infrastructure. This will give engineers and planners a better understanding of how to incorporate indirect impacts in their planning and design processes.

Application of detailed systems-based risk analysis and production of final synthesis report

Scientific area: Climate modellers, the risk analysis community, climate impacts researchers

Expected date of publication: July 2017

Organisation in charge: University of Newcastle upon Tyne

The report will be composed of three parts:

- For the first time in RAMSES, UNEW's CityCat urban flood model will be run for the whole Greater London area using cloud computing to allow a finescale understanding of areas in greatest risk of pluvial flooding from future extreme rainfall events. The report will outline the methodology employed to undertake this analysis, the results of this analysis and the testing of adaptation options to reduce the impacts of such events;
- A combination of the detailed climate modelling (see RAMSES report "Agglomeration-scale urban climate simulation and Urban-Climature Simulations" below) and the new addition of air quality modelling into the UIAF will allow for the production of a report on health risks in urban areas from extreme temperatures. This report will outline the methodology used to undertake such assessments and results from the case study cities that are analysed;
- The developments on the UIAF will allow the integrated assessment of city-scale adaptation options and the undertaking of a detailed-level risk and vulnerability analysis for other RAMSES case study cities (where the required data is available).

A final synthesis report will therefore be produced including recommendations for policy-makers for inclusion of climate adaption in urban plans and demonstrating how the UIAF can be used in cities to improve their assessments.

Validation of agglomeration-scale climate simulations

Scientific area: Climate sciences

Date of publication: May 2014

Authors and co-authors: Koen De Ridder, Juan Angel Acero, Dirk Lauwaet, Wouter Lefebvre, Bino Maiheu, Maddalen Mendizabal (MITO)

To be downloaded at: <http://www.ramses-cities.eu/resources/>

Numerical climate models are inherently uncertain. In order to gain confidence in simulation results, models need to be validated. This is achieved by comparing simulated quantities (temperature, wind speed, etc.) with observed values. This report describes the configuration of the involved climate models, the data used, and the validation methodology. Moreover, the deliverable contains an analysis of simulated urban climate fields for the current day situation. In particular, it is shown that urban areas in Europe experience twice as many heat wave days than nearby rural areas.

We believe this latter information to be useful for policy makers at different levels, as it helps to better define and adapt urban heat health action plans, appropriately triggered by the local urban climate situation.

Related scientific articles:

Wouters, H., De Ridder, K., 2013, The diurnal evolution of urban heat island of Paris: a model-based case study during Summer 2006. *Atmospheric Chemistry and Physics* 13, 8525-8541 (<http://www.atmos-chem-phys.net/13/8525/2013/acp-13-8525-2013.html>)

K. Kourtidis, A.K. Georgoulas, S. Rapsomanikis, V. Amiridis, I. Keramitsoglou, H. Hooyberghs, B. Maiheu, D. Melas, A study of the hourly variability of the urban heat island effect in the Greater Athens Area during summer, *Science of The Total Environment*, Volume 517, 1 June 2015, Pages 162-177, ISSN 0048-9697, <http://dx.doi.org/10.1016/j.scitotenv.2015.02.062>. (<http://www.sciencedirect.com/science/article/pii/S0048969715002053>)

Koen De Ridder, Dirk Lauwaet, Bino Maiheu, UrbClim – A fast urban boundary layer climate model, *Urban Climate*, Volume 12, June 2015, Pages 21-48, ISSN 2212-0955, <http://dx.doi.org/10.1016/j.uclim.2015.01.001>. (<http://www.sciencedirect.com/science/article/pii/S2212095515000024>)

Agglomeration-scale Climate Simulations

Scientific area: Climate sciences

Expected date of publication: March 2015

Organisation in charge: VITO

To be downloaded at: <http://www.ramses-cities.eu/resources/>

Currently, climate projections are only available at global and regional scales. Urban climate projections, which account for local effects such as the urban heat island, and which cover long enough periods to be climatically relevant (tens of years) are non-existent. In this report we describe a methodology to achieve urban climate projections, and we analyse the simulated future urban climate in terms of, among others, heat stress indicators. The results generated in this report will be a refinement of current global and regional climate projections, to which it thus constitutes an added value scientifically.

For policy makers, this information is useful as it helps to assess future urban climate conditions, and plan ahead. Utility companies, especially electricity producing and distributing companies could make good use of the results, by helping them make better projections of future urban energy consumption requirements.

Urban adaptation effects on urban climate

Scientific area: Architecture, infrastructure and urban design research

Expected date of publication: November 2015

Organisation in charge: Norwegian University of Science and Technology

This report explores feedbacks between adaptation measures and urban climate, based on results from small-scale modelling, to identify potential trade-offs or synergies between different policies. Certain adaptation measures can have unwanted feedbacks on climate. For example, at a global scale measures such as desalination plants are energy intensive and thus have greenhouse gas emissions implications. At a more local scale, measures which are likely to have an impact are essentially those affecting the physical structure of the urban surface, such as those related to building density, green-blue infrastructure within a city, and albedo of urban materials. Relevant urban design scenarios will be implemented, and their impact on local climate parameters simulated. The focus of the analysis is on extreme weather and its local effects. Special emphasis will be given to feedbacks between climate aspects (e.g. thermal comfort) and air pollution at the microscale.

Review on climate change losses and adaptation costs for RAMSES case study cities

Scientific area: Economics

Date of publication: March 2014

Authors: Graham Floater, Annabella Bujak, Gabrielle Hamill, Madeleine Lee (Seneca Consultants and London School of Economics)

Contributions: Floriana Ferrara, Giuseppe Forino, Gaell Mainguy

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The review of climate change costs covers two main areas. First, the costs of specific climate impacts are examined in various urban contexts. Impacts include extreme weather events such as sea flooding, pluvial flooding, heatwaves and drought. Second, RAMSES case study cities were examined to investigate the costs of historical events experienced by the cities in question. A survey of officials including those from the RAMSES case study cities and other cities was undertaken to assess the perceived costs of different climate impacts. The review provides city officials and other stakeholders with an initial view of the impacts and - where available - costs that different cities face. The information generated in this deliverable will mostly benefit policy makers and urban planners, by providing measures to help adapt to adverse (future) climatic conditions in cities.

Costs and economic data for RAMSES case study cities

Scientific area: Economics

Expected date of publication: September 2015

Organisation in charge: Seneca Consultants, London School of Economics

The costs and economic data for the RAMSES case study cities will be prepared for the Integration into the RAMSES Common platform and made available for [Climate-ADAPT](#).

Evaluation of adaptation measures regarding investment costs and averted losses

Scientific area: Urban and climate impact research, economics

Expected date of publication: September 2016

Organisation in charge: Potsdam Institute for Climate Impact Research

The Adaptation Cost Curves compare averted losses with investment costs of various adaptation measures aiming at facilitating decision-making in the area of adaptation. It will provide input on costs and effects of different adaptation measures to be used as a decision support for policy makers and urban planners.

Framework for adaptation costs assessment in cities

Scientific area: Urban and climate impact research, economics

Expected date of publication: July 2017

Organisation in charge: London School of Economics and Seneca Consultants

RAMSES will develop a framework of prioritisation for policy makers by developing a decision hierarchy based on the impact likelihood, impact costs and response costs. The framework will include short and long term costs; risk ranges; and cost comparisons for integrated policy strategies which avert losses across a range of measures and sectors). An important component of the cost assessment framework will be criteria for prioritising early actions.

Review on economic assessment of economic damage or adaptation costs of health effects

Scientific area: Environmental health economics

Expected date of publication: February 2015

Authors: Gerardo Sanchez Martinez, Eloise Williams (World Health Organisation – Europe)

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The report is taking stock of existing methodologies and evidence on the economic evaluation of health impacts of climate change, and also on the costing of the adaptation necessary to protect health from climate impacts. It identifies gaps and research needs in the area.

Assessment tool to estimate the economic costs of health impacts of climate change

Scientific area: Public policy evaluation

Expected date of publication: June 2015

Organisation in charge: World Health Organisation - Europe

An assessment tool is presented, based on a methodology to account for the economic cost of climate-sensitive health outcomes, including premature mortality, additional healthcare use and lost productivity, in a flexible framework with a specific focus on local adaptation

Analytical framework to analyse the adaptation strategies implemented by cities

Scientific area: Urban and climate impact research, policy research

Date of publication: May 2014

Authors: Kari De Pryck, Charlotte Da Cunha, Yorghos Remvikos, François Gemenne (Université de Versailles Saint-Quentin-En-Yvelines), Giuseppe Forino (T6 Ecosystems)

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The report presents a framework for studying the decision making process of adaptation measures, the key concepts (with focus on the resilience approach) and the operationalization of the framework to the RAMSES case study cities.

A typology of tools available for policy makers and their assessment

Scientific area: Policy research, cities, adaptation, resilience, risk research

Date of publication: March 2015

Organisation in charge: Université de Versailles Saint-Quentin-En-Yvelines

This report offers a review of adaptation tools available for policy makers at the city level taking into account the need for complementary mitigation and adaptation, the multilevel governance of climate change issues and the specificities of cities and their needs. The report uses the RAMSES case study cities to analyse what has concretely been done cities with different socio-economic profiles.

Identification of drivers of urban growth in the political and institutional context

Scientific area: Policy research, cities, adaptation, resilience, risk research

Expected date of publication: November 2015

Organisation in charge: Université de Versailles Saint-Quentin-En-Yvelines

The report identifies and discusses drivers and barriers to decision-making and urban growth in the political and institutional context. This will be drawn from intensive field works in the RAMSES case study cities.

Policy tools and their application to case studies

Scientific area: Policy research, cities, adaptation, resilience, risk research

Expected date of publication: December 2016

Organisation in charge: Université de Versailles Saint-Quentin-En-Yvelines

Policy tools will be developed to shape the urban structure in the light of climate change adaptation. They will be tested in RAMSES case study cities. Reports (policy brief) and publications from the experiences in the RAMSES case study cities will be written.

Scientific publications will be drawn from the field work.

Factors of transition and their dynamics

Expected date of publication: December 2016

Organisation in charge: TecNALIA

A conceptual model of resilience transition factors, variables and their correlation in a conceptual model is presented in this report.

Those transition factors will be of interest for the definition of adaptation policies at different scales (local, regional and EU levels), as well as for practitioners at local level or at structures providing support to municipalities for a better understanding of adaptation key conditions.

Tool for transition analysis at urban scale

Expected date of publication: July 2016

Organisation in charge: TecNALIA

A model or tool will be presented that allows the quantification of the state of transition conditions beyond a vulnerability assessment and adaptation options.

The tool will be useful for analysing local adaptation plans and could be of interest for institutions at different scales (regional national and EU levels) providing support to municipalities, as

well as for policy makers and practitioners at local level addressing and defining adaptation plans.

Transition reports for selected RAMSES case study cities

Expected date of publication: May 2017

Organisation in charge: Tecnalia

Definition of transition pathways for selected RAMSES case study cities and analysis of its transferability to city typologies (defined in other parts of the RAMSES project).

The transition pathways report will be useful for defining local adaptation strategies and could be of interest for institutions at different scales (regional national and EU levels) providing support to municipalities, as well as for policy makers and practitioners at local level designing adaptation strategies.

Stakeholder survey report on the state of play with regard to adaptation in European and international cities

Scientific area: Policy research, cities, adaptation, resilience, risk research

Date of publication: March 2014

Authors: Alberto Terenzi, Astrid Westerlind Wigström (ICLEI European Secretariat)

To be downloaded at: <http://www.ramses-cities.eu/resources/>

The survey report takes stock of adaptation efforts including the status of urban adaptation processes, capacity building needs and enabling factors to facilitate adaptation action based on the results of a global and a European wide survey, European city workshops, and in-depth city interviews. The report can inform research in the field of adaptation to climate change.

The report could be an input to demonstrate the realisation of the EU Adaptation Strategy and highlight support opportunities and the potential role of the EC in strengthening urban adaptation processes. In addition it can serve adaptation managers, other departmental technical staff and representatives of utility companies in cities to get an overview of adaptation activities that other cities are doing in the field and getting an idea on opportunities and problems.

Web-based audio-visual guidance application

Scientific area: Climate adaptation research community

Expected date of publication: September 2015

Organisation in charge: Climate Media Factory

The web-based audio-visual guidance application will provide an application with comprehensive content accessible without personal guidance from experts. The most detailed layer will include target group orientated condensations of the scientific results, background information and links to further reading.

Transition handbook and training package

Expected date of publication: November 2016

Organisations in charge: ICLEI European Secretariat, Tecnalía

The training events will target city officials (in the case study cities) and provide them with hands on training on how to use the developed tools and methods delivered within the project to support the development of their adaptation strategies. The training curriculum will be based on a practical transition handbook and a training package. The events will help cities to apply the learnings of the RAMSES project to their city context and will help policy makers and technical staff to make use of the new tools and methods that can support them in their adaptation management and governance processes and plans.

Final scientific publication on RAMSES results

Scientific areas:

- Architecture, infrastructure and urban design;
- Climate adaptation;
- Climate modelling;
- Climate related risks;
- Economics;
- Environmental health economics;
- Policy and adaptation to climate change;
- Urban and climate impact;
- Transition, adaptation and mitigation;
- Urban policy and governance;
- Vulnerability and resilience.

Expected date of publication: September 2017

Organisation in charge: Potsdam Institute for Climate Impact Research

The final publication will present the main outcomes of the RAMSES project in terms of research and policy recommendations. The results will be targeted to the research community at EU and international levels. The publication will include all the topics covered by the RAMSES-project and its consortium.

RAMSES Events

European Climate Adaptation Conference 2015 - ECCA 2015

The [ECCA 2015](#) conference will take place from 12 to 14 May 2015 in Copenhagen. The RAMSES project is a co-organiser of the event and first RAMSES research results to a scientific audience.

RAMSES Events

Stakeholder Dialogues

The Stakeholder dialogues allow for relevant stakeholders/target groups to learn from the research being conducted within RAMSES and to provide comments and feedback that will be integrated into the RAMSES activities and outputs. The report and communication outputs on the Stakeholder dialogues will provide valuable information on 'hot' research topics on adaptation relevant for city stakeholders.

The [1st Stakeholder Dialogue](#) took place in Brussels in October 2013 and revolved around important topics such as indicators for resilient architecture and infrastructure, the cost of adaptation in cities and transitions towards resilience and sustainability. As a result, the Stakeholder Dialogue also produced a video gathering impressions of the day from participants and their take on urban adaptation, and a report summarising the results of the day's exercises. Both can be found on the RAMSES website. After the 1st Stakeholder Dialogue, a webinar took place which presented the SD topics and results to a wider audience. A video recording of the webinar is available on the RAMSES website.

The [2nd Stakeholder Dialogue](#) will take place in Copenhagen on 11th of May and will feature contributions by the World Health Organisation, the University of Versailles and Tecnalia and its focus will be on heat waves and their link to health problems, tools and instruments for policy-making and drivers and enablers to fostering transitions in cities. Also this time,

impressions of the day will be filmed and gathered in a short film that will be made available on the RAMSES website. Similarly to the 1st Stakeholder Dialogue, a webinar will take place after the 2nd Stakeholder Dialogue in order to give the opportunity to participants who could not attend the event to access the information and some of the impressions shared. This will be then uploaded on the website.

The **3rd Stakeholder Dialogue** and webinar will take place in 2016

RAMSES final conference

The final conference will be organized by the Potsdam Institute for Climate Impact Research with the support of the European office of ICLEI. It is planned for autumn 2017 (date t.b.d.). The conference aims at addressing both researchers and city stakeholders to discuss relevant outcomes of the project. It is intended to link the conference to a relevant related event in order to increase visibility.

Dissemination and Networking

www.ramses-cities.eu

Through the RAMSES website stakeholders/target groups can learn about the objectives and goals of the project as a whole in both learning about the different research elements, in becoming familiar with the project partners, and reading about the case cities that are involved in the project and the research activities. Also the website provides information on upcoming events that RAMSES is organising. The website also hosts all the public outputs developed within the project and will disseminate and expose news and updates.

Dissemination and networking

RAMSES eNewsletters

The RAMSES eNewsletters inform about research results and key events of the RAMSES project. The aim is to keep all relevant actors in the field of climate change adaptation up to date with regard to much needed quantification of the impact of climate change on cities and criteria to prioritise adaptation options.

Stakeholder Dialogue Video

„Impressions from the 1st RAMSES Stakeholder.“ The 1st RAMSES Stakeholder Dialogue gave participants the opportunity to share insights and discuss their experience with key adaptation experts and stakeholders and with cities that are

engaged in adaptation. Video can be found at:
<http://www.ramses-cities.eu/resources/>

Policy briefs

The policy briefs will translate the research and findings within the project and provide a position paper that will feed into European and international processes on urban adaptation. The policy briefs will support policy makers both at the local (urban) and the European levels to put the research outputs into policy language and context. They serve as an argument on why it is important to support and progress adaptation in cities - help building a business case for adaptation, and to align the adaptation work with ongoing processes.

RAMSES project factsheet

The information factsheet is mainly for the European level to provide general information on the project and is regularly updated.

RAMSES project brochure

The brochure for project presentation is a general information material, giving an overview on project contents and main planned results. It is targeted to be disseminated at events, both for stakeholders as well as for researchers.



The work leading to these results has received funding from the European Community's Seventh Framework Programme under Grant Agreement No. 308497 (Project RAMSES - Reconciling Adaptation, Mitigation and Sustainable Development for Cities).