

4th Working Group Meeting

De Dijkgraaf, Maasbommel

10th - 11th March 2010

Report

























Contents

Programme

Introduction	1
Plenary: Presentation of the concept for the climate check tool	1
Working Group Sessions	3
Working Group 1	3
Working Group 2	7
Working Group 3	10
Working Group 4	13
Conclusions and Wrap-up	16
Interactive communication actions	17
Watergame Tiel East	17
Map Table	18
Site Visit	19

Annex

Working group planner WG 1

Working group planner WG 2 (with list of planned twinning activities)

Working group planner WG 3

Working group planner WG 4

List of participants

Presentations (on CD ROM)

Programme				
March 2010				
Steering Group Members				
Vincent Kuypers, ALTERRA Ad Koolen, Van Hall Larenstein				
Anke Althoff, Lippeverband				
Birgit Haupter, INFRASTRUKTUR & UMWELT				
moderated by chair Ton Verhoeven, Nijmegen				
moderated by chair Hans van Ammers, Arnhem				
Jan Dirk van Duivenbode, Rijkswaterstaat				
March 2010				
Vincent Kuypers, ALTERRA Ad Koolen, Van Hall Larenstein				
moderated by chair Torsten Frehmann, Emschergenossenschaft				

moderated by Eveline Huyghe,

West Vlaamse Intercommunale

presented by chairs

Anke Althoff, Lippeverband

WG 4 "Awareness raising"

Plenary Session

• Fact sheets for awareness raising

• Working group planners of all WGs

• Conclusion and wrap-up

• Link module 5 of tool / data base of best practises





The 4th working group meeting of Future Cities took place in Maasbommel near Tiel in the Netherlands. For two days the Future Cities project partners and working group members intensely worked on the concrete development of the Future Cities check for climate proof cities and the twinning activities.

In interactive communication sessions the working group members made lively experiences with communication tools which were developed by some Future Cities partners.

The project area of Tiel East was visited where insight could be gained on the possibilities to adapt to climate change with combined water and green roof measures.

Introduction

Anke Althoff welcomes the Future Cities partnership to the 4th working group meeting and presents the aims of the meeting:

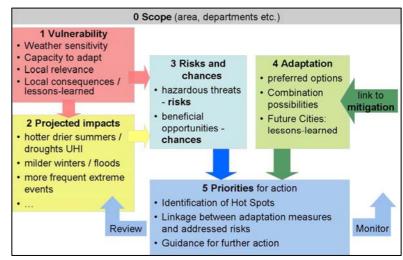
- Joint understanding of concept for "assessment-check for climate proof city regions"
- 2. Identification of WGs contribution to the modules of the tool
- 3. Agreement on "homework" what has to be done for the mid-term Conference in September 2010

Plenary: Presentation of the concept for the climate check tool

Birgit Haupter explains the main functions and interlinkages of the "climate check tool" as it was agreed in the Project Steering Group. A detailed description of the concept can be found for download on the Future Cities homepage in the working group section.

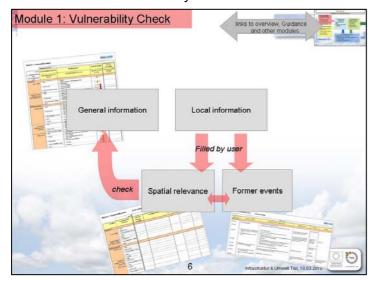
The tool provides general information as well as the user can fill in local information interactively.

For example module 1 on the vulnerability assessment consists of a general and local part:





- General part: Receptors, their weather/climate sensitivity, impacts and their class of vulnerability are provided as automatic content; the user has the possibility to change all preset content or add more receptors.
- <u>Local part:</u> The local part consists of tables that have to be filled by the user regarding scope-specific former events, lessons learned and the spatial relevance of receptors / vulnerability.



The working group members discuss the planned concept of the tool and comment on the viability from their working background requirements.

The following issues will be considered with the further development of the tool:

 The selection of the local circumstances and spatial conditions, e.g. a town located at the sea or at a river should be possible in order to narrow the working process with the tool. This is discussed controversially since limiting the scope at the start of the tool might also narrow the view of the user and reduces the functions of

the tool as a checklist reminder. However, the tool will offer the possibility to adapt the general information given (e.g. in the general part about vulnerability) to different general local situations (which can be selected within the module "scope").

- It is commented that it would be nice to have results on maps to show spatial
 consequences, not only as "check list". However, the tool will not allow interactive
 work on individual local maps. Nevertheless, spatial aspects can be considered, with
 descriptions as well as the user can include information on available local maps. . In
 Module 5 the Future Cities best-practise measures can be visualised with graphs,
 maps, photos etc.
- It is remarked that special attention has to be paid to the future availability of links if provided (e.g. in module 2 concerning service organisations on climate change projection data). Only important and persistent organisations should be included.
- The numbering of the modules 4 and 5 is questioned. It is clarified that this is caused by the development history of the concept. For the final version probably no numbers will be used. This will also accommodate the fact that the user of the tool doesn't necessarily have to work through the modules according to the order of the numbers but can start with different modules or can make use of single modules as well.

The responsibilities for the further development of the tool are agreed as follows:

- Project Steering Group: Main deciding body on concept, aim etc.
- Partner Task Force (Members are the actual chairs of the 4 working groups plus the other partners of the PSG/ named representatives, if they have interest): Accompany development, prepare decisions
- Working Group members: Work on content, contribution of experiences, try out, proposals



- External Project Support: Development of details, prepare drafts, pre-filled sections, prepare literature input, technical development
- Advisories: Give feedback on important interim results

The next steps which have to be taken besides the work on the content of the tool are:

- A striking name of the tool has to be found.
- With the development of the tool specific terms have to be clarified further, e.g. "Hot spots", the description of the different target groups (e.g. "planners").
- The links and concrete inputs of the working groups' work have to be concretised.
 This will be done in the parallel working group sessions.



Working Group Sessions

Working Group 1

Agenda

- 1. Status of activities after 3rd WG meeting
- 2. Further work on modules: Link WG results input for modules of tool
- 3. Vulnerability module local part example and conclusions
- 4. Update of fact sheets procedure and structure
- 5. User inquiry on the tool test
- 6. Input for brochure of results for midterm conference
- 7. Term urban morphology/urban structure conclusions for tool
- 8. Update of working group planner

1. Status of activities after 3rd WG meeting

The chair of WG 1 Ton Verhoeven reports on the status of the working group's work. Between the 3rd and 4th WG meeting activities werde undertaken as agreed and will be subject to further discussion in this WG meeting.

2. Further work on modules: Link WG results - input for modules of tool

Stefanie Greis (INFRASTRUKTUR & UMWELT) explains the possible links between each module of the tool and the working groups' work (see table). E.g. the exemplary results of the project partners will inform the data base of the vulnerability check module.





Furthermore it is planned to have the tables of the tool tested by (partly) filling in by the working groups and / or project partners and discuss the results in the working group meetings.

Table: Integration of working group actions in the tool

WG	WG-Action	Integration in the Tool – module(s)
1	Fact Sheets: all information	Module 5: as information about Future Cities measure
1	Fact Sheets: addressed problems	Module 4 & 5: connection between adaptation measure and problems addressed
1	Fact Sheets: impact addressed	All: connection between climate impact/ vulnerability and adaptation measures in the background of the Tool
1	Fact Sheets: Lessons learned	Module 5: information about lessons learned for Future Cities adaptation measures
1	Fact Sheets: stakeholders to involve	Guidance: collections of stakeholders which should be involved during the adaptation process
1	Regional vulnerability assessment, PP4sub	Module 1: Information on Indicators, Receptors; reference
1	Local Climate Impacts Profile, PP 4	Module 1 / Guidance: Example for local information to be collected and filled in by the user; lessons learned
1	Further local examples	Module 1 / Guidance
2	Twinning reports: contribution to module 5	Module 5: lessons-learned (integration as Future Cities example)
2	Twinning reports: contribution to module 5	Module 5: references to read more about Future Cities measures
2	Twinning reports: contribution to module 1 / 5	Module 1 & 5: Examples of local problems and ways to address them (collection of photos, maps etc.)
3	Evaluation of measures	Module 5: description and assessment of measures and combination possibilities
3	Evaluation criteria	Guidance: monitor process
4	Awareness raising measures	Module 5: Awareness raising (and other non structural) measures – esp. for combination with technical measures
4	Target Groups list	Guidance: who to involve

From the partner Rouen Seine Aménagement the wish is expressed to strengthen the link to the Future Cities mitigation measures. It is agreed that with the further development of the tool the link of mitigation measures such as the geothermal measures with the tool shall be worked out more clearly.

3. Vulnerability module - local part example and conclusions

Stefanie Greis presents the further development of the vulnerability module. The local part of the tables related to former events were exemplary filled in by information collected by Chantal Lass from project partner Hastings (while preparing the Local Climate Impacts Profile). Chantal Lass concludes that the table is clearly structured and works well for the approach taken in Hastings. The meaning of the terms should be explained clearly in the guidance to help the user.

Chantal Lass reports on the time effort needed for the allocation: 4 - 6 weeks (in parallel to daily working tasks) were needed to analyse press and media reports for the list of events and reported consequences. With this the services were asked about their knowledge on impacts these events had caused. In a next step in Hastings the Local Climate Impacts



Profile will be linked to distinctive areas. In the further discussions some partners express their general willingness to fill in a similar local part on former events (partly) to support the experiences of Future Cities with this approach.

It is proposed not only to determine the vulnerability of infrastructure, but also provide the possibility to check the positive and negative effects of planned infrastructure on adaptation to climate change.

Vulnerability assessment – table "former events"

(exemplary filled in by project partner Hastings) – shown below is a part of the whole table

Spec. event	Description of Consequences (indirect impacts of event)		Responses taken	Receptors	Location
Heat/ hea	at wave				
18/04/2 003	Temperatures above 80F	 Thousands of visitors head towards coast. Field and Gorse fire (difficult to say whether due to hot weather or arson) 		Social infra- structure	
15/07/2 003		•	Pet owners told to take extra care of animals in Heat wave by RSPCA		
05/08/2 003	Mean August temperature, Eastbourne 19.6C, second highest since 1867 (highest = 1995). Temperatures anticipated to reach 100F (37.8C).	 Rail and road disruptions. Parks and open spaces – busier, large number of visitors to town, Additional litter on the beach Increases in incidences of respiratory problems and health difficulties for those suffering from angina and heart problems. Fires on hills 	AA warns that tarmac can melt in the heat. ESCC eventually received £4.6 million to help repair roads damaged during the Heat wave.	Transport, social infra- structure, waste service, public health	Eastbourne

4. Update of fact sheets - procedure and structure

Birgit Haupter reports that the fact sheets on adaptation measures were revised by the project partners as applicable ahead of the 4th working group meeting. A category to inform about the "link to urban structure" has been added. Comments from the working group members are:

- Enhance/clarify the different categories of scale of measure
- Integrate the Future Cities examples and topics on mitigation, "adapt" the fact sheets accordingly.
- Include the possibility to determine critical / negative conditions for adaptation measures.

These proposals will be considered in the further development.

The working group agrees on the further procedure for completing the fact sheets:

- Check of available information (e.g. in application form, 1st brochure, progress reports etc.) to complement fact sheets (responsible: INFRASTRUKTUR & UMWELT)
- Targeted questioning of missing input (INFRASTRUKTUR & UMWELT to project partners)



5. User inquiry on the tool - test

The working group members as potential users of the tool are asked to fill in an inquiry form.

As a test the working group is split into mini groups (2-3 persons) which fill in parts of the planned inquiry concerning:

- Target groups / persons
- Module 1 Vulnerability Check
- Module 2 Climate Change Impacts
- Module 5 Adaptation Options
- Module 4 Priorities for Action

The filled in forms will help to develop the inquiry form which will be send to the

partnership in April 2010 (responsible: INFRASTRUKTUR & UMWELT).

ASSESSMENT TOOL – QUESTIONING FUTURE CITIES PROJECT PARTNERS Name PP Organisation Target groups / persons 1. Who in your organisation, region or city would be interested to use the tool – only Future Cities involved or others as well? 2. What is your perception: could the tool be used by other cities/regions than the Future Cities partner cities/regions?

11.1

6. Input for brochure of results for midterm conference

Ton Verhoeven informs the working group members that the input for the 2nd Future Cities brochure on the tool and on results of the partner projects has to be submitted until end of May 2010. The working group members will be asked by their related project partners, if applicable.

7. Term urban morphology/urban structure - conclusions for tool

Vincent Kuypers explains the definition of the term urban morphology as it is used for the urban heat study of Arnhem. The document was sent to all working group members. The "urban morphology" has a decisive influence on the city climate e.g. the concept of the compact city with often little green space and closed building forms aggravates urban heat island effects. The working group members are welcomed to send their feedback on the definition to Vincent Kuypers. The link and use of the concept of "urban morphology" within the climate check tool will be taken into account during the further development.

8. Update of working group planner

Agreement on working steps until the next working group meeting

Add astagarias in fact abouts, and a sta

Α.	Add categories in fact sneets: scale, etc.	IU
B.	Integrate available information in fact sheets,	
	ask for missing information, feedback PP	IU/PPs
C.	Work out detailed examples of fact sheets for next meeting	IU
D.	Check improved integration of mitigation measures	IU/Task force
E.	User inquiry	IU/PPs
F.		IU/Task force
	Feedback on definition to Vincent Kuypers	PPs

G. Description of tool / input for brochure PPs/ end of May

Completion

Ton Verhoeven thanks the working group members for their engaged work and announces that at the next working group meeting Anke Althoff will take over as chair of WG 1.



Participants of Working Group 1:

Anke Althoff PP1 Lippeverband

Marion Visser PP2 Municipality of Arnhem Jos Verweij PP2 Municipality of Arnhem

Chantal Lass PP4 Hastings

Helene Mogelhoj
Ton Verhoeven (chair)
Veroniek Bezemer
Bénédicte Salle
Annemieke de Kort
PP4 Sub-Partner Sea Space
PP5 Municipality of Nijmegen
PP6 Rouen Seine Aménag.
PP7 Municipality of Tiel

Eveline Huyghe PP8 West-Vlaamse Intercomm. Stijn Saelens PP8 West-Vlaamse Intercomm.

Vincent Kuypers Alterra, WUR (with PP2)

Ad Koolen VHL - Van Hall Larenstein (with PP2)

Hubert Penicaud RSA (with PP6)

Birgit Haupter INFRASTRUKTUR & UMWELT Stefanie Greis INFRASTRUKTUR & UMWELT

Working Group 2

Agenda

- 1. Introduction
- 2. Agreements in Hastings September 2009
- 3. Twinning last half year
- 4. Planned new twinning
- 5. Additional results and conclusions
- 6. Completion
- 7. Update of working group planner

1. Introduction

Hans van Ammers welcomes all participants of the working group. He presents the planned agenda. He explains that the goal of this working group meeting is to review and discuss the twinning activities of the last months and to plan and organize the twinning activities in the next half year. A special question will be how to link the future twinning activities with the modules of the assessment tool. It is agreed that when planning the new twinning activities the work group should carefully check which input the twinning can deliver for the modules of the tool.

2. Agreements in Hastings September 2009

Hans van Ammers checks with the working group the agreements of the last meeting in Hastings in September 2009: The revised twinning formats and the adaptation of the first

twinning report to the new formats were completed done by INFRASTRUKTUR & UMWELT and the project partners. The second twinning report was drafted and delivered (including three twinning sub reports of the partners). The concept for the evaluation has been post-poned





due to the developments of the assessment tool: The evaluation criteria shall be linked with module 5 of the assessment tool.

3. Twinnings last half year

The second major twinning activity took place from August 2009 to February 2010. Subject was the energy study for the quarter "De Vloei" in leper (by VWI). Involved were the partners from Arnhem and from Hastings. Nathalie Garré presents the results of the twinning (see presentation charts and twinning report). This twinning took place with phone conferences and exchange of comments via email. This was very successful for the issues tackled. Subject of the twinning was the preparation and the improvement of the terms of reference of the energyg study in leper and the review of the bids. The three participating partners are preparing energy studies. To come to an effective tender and to get qualified bids expertise was required. Arnhem and Hasting brought in their experience with the energy studies to support the Future Cities energy study for leper. Arnhem reviewed and commented on the draft terms of reference. Hastings delivered examples from terms of reference for energy studies. In phone conferences and emails the further progress was developed. On this base the tender was made and the bids were reviewed jointly by the partners.

The content of the energy studies are the evaluation of possibilities for a collective supply system for the new urban quarter, maintenance aspects, comparison of supply solutions and cooperation aspects for the companies involved. An option is to extend the study on legal aspects. The study shall be completed in approximately three months (June 2010).

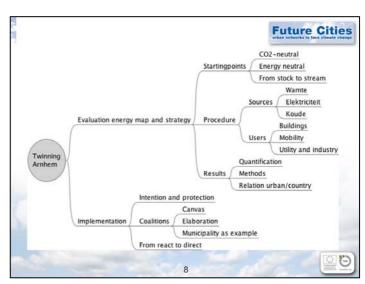
The partners report of language problems: Due to the fact that the documents which had to be reviewed had some hundred pages it was not possible to translate everything to get a review and a feedback from the British partners on the Dutch documents. So the input from Hastings was their examples and general comments at the begin of the drafting process. The following review of the bids and the drafts of the terms of reference took place between the Dutch speaking partners VWI and Arnhem.

Hastings is interested in a follow up activity to learn about the results of the study once it is finished. A follow up twinning of this shall be developed in the second half of 2010.

4. Planned new Twinning

Four new twinning activities are discussed and agreed:

a) Energy study and energy map and strategy for Arnhem: The content of the twinning will be to discuss the approach and the study, to compare the different partner approaches, to check the transferability, to review the criteria concept for the assessment tool in the light of this study (link to modul one or five of the assessment tool) This shall influence the energy studies of the other partners. The activity shall take place before summer 2010.



Interested partners are Rouen, Nijmegen and Bottrop (sub-partner of Lippeverband). Arnhem will fill in a twinning request form and deliver the concept for the twinning (Albert Anijs, asap).



- b) Implementation strategy for the energy strategy of Arnhem: This twinning shall focus on the participation and awareness raising aspects of an energy study, discussing the approach for implementation and jointly answer open questions. This activity shall take place before summer 2010, too. Interested partners are Rouen, Nijmegen, Tiel and VWI. Arnhem will fill in a request form and a concept for twinning, too. INFRASTRUKTUR & UMWELT is asked to participate in the twinning to bring in the aspect of the criteria catalogues for module five.
- c) Demands for urban design and urban development competition in Rouen (the focus is on energy and emission reduction aspects as well as adaptation issues in the terms of reference for a design competition). Goals are to bring together the experiences of this stage of planning in the reflection of different questions related to this urban development competition. The goal is to draft the terms of reference jointly or even to produce exemplary terms of reference. Interested partners are Nijmegen and WVI (but another department than the future cities partner so far) and Arnhem. The request form will be filled by Rouen.
- d) Green Roofs strategy regarding biodiversity aspects in Rouen: The goals are to bring together the experiences and to discus the benefit of biodiversity in opposite to possible negative effects. A general assessment (including assessment criteria) shall be discussed for biodiversity aspects especially (but also in the context of other benefits or disadvantages of green roofs). Interested partners might be Nijmegen, other partners are checking their interest. A request form will be filled by Rouen.

5. Additional results and conclusions

It is discussed and agreed that the planned meeting 4bis of WG 2 is not necessary.

It is also agreed that Working Group 2 will concentrate on the twinning coordination. The preparation, review and link to other working groups and the modules of the twinning activities, is very important and needs good planning. Doing so Working Group 2 will contribute to the assessment tool modules. The evaluation criteria discussion should be concentrated in one working group (WG 3) for action plans and implementation measures jointly.

The application includes 23 twinning reports. The concept was to have one twinning report on each twinning event by each participating partner. A more integrated concept was developed comprising one joint twinning report for all participating partners per twinning action consisting of sub-reports of each partner will be part of the joint report. It is agreed that this should be reported to the JTS in the next progress report: the number of sub-reports will reach the number of twinning reports as planned but the summarising twinning reports will be less.

6. Update of working group planner

Agreement on working steps until the next working group meeting

Twinning requests and activities will be undertaken for:

A.	Energy study and energy map and strategy for Arnhem	request by PP2
B.	Implementation strategy for the energy strategy of Arnhem	request by PP2
C.	Demands for urban design and urban development competition in Rouen	request by PP6
D.	Green Roofs strategy regarding by biodiversity aspects in Rouen	request by PP6



Completion

Hans van Ammers thanks the working group for the cooperation in the last one and a half years. He will pass over the chair post of the working group to Thierry Verrier (Rouen Seine Aménagement) for the next working group meeting.

Participants of Working Group 2:

Kirsten Adamczak PP1 Lippeverband

Hans van Ammers (chair)
Albert Anijs
PP2 Municipality of Arnhem
PP3 Emschergenossenschaft
PP3sub Municipality of Bottrop

Jane Dodson PP4 Hastings

Antal Zuurmann

Thierry Verrier

Ine van den Hurk

José Ziekenheiner

PP5 Municipality of Nijmegen
PP6 Rouen Seine Aménag.
PP7 Municipality of Tiel
PP7 Municipality of Tiel

Trui Naeyaert PP8 West-Vlaamse Intercomm. Peter Heiland INFRASTRUKTUR & UMWELT

Working Group 3

Agenda

- 1. Introduction
- 2. Assessment criteria and contribution to module five of the assessment tool
- 3. Process of criteria development
- 4. The energy study for Luciline: Which criteria can we generate from it
- 5. Conclusion for the development of assessment criteria
- 6. Test evaluation in 4/2010
- 7. Next actions
- 8. Completion

1. Introduction

Torsten Frehmann welcomes the working group members to the meeting. The key issues for this working group are the evaluation criteria and the test run for the evaluation in the second half of 2010.

2. Assessment criteria and contribution to module five of the assessment tool

Stefanie Greis (INFRASTRUKTUR & UMWELT) presents the general idea of the link between the assessment tool and the



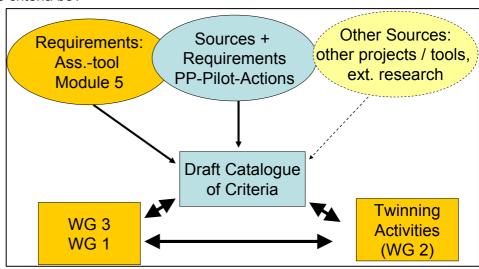


working group 3. Working group 3 should deliver the assessment criteria which are used in the assessment tool. She reviews the concept of the assessment tool to demonstrate where and how the input shall be located in the tool. Peter Heiland adds the following structure for the process of criteria development: A draft catalogue of criteria shall be developed following the requirements of the assessment tool (adaptation catalogue / module 5) using the Future Cities pilot actions as sources for criteria for the different key components in the project. Other sources like similar projects or similar tools shall be evaluated to learn from other research on this field. The draft catalogue will be discussed and improved by Working Group 3 (in cooperation with Working Group 1) and by the twinning activities (linked to Working Group 2). It is agreed that twinning activities should always try to deliver input for the improvement of the criteria catalogue.

3. Process of criteria development

The discussion of the proposal brings up especially the following open questions which have to be answered in the next step of drafting the criteria catalogue:

- How detailed can the criteria be?
- How much generalised do they have to be to be of use for different partners?
- How do we deal with national and regional specific framework conditions?
- How do we make the criteria transferable?



The general view is that

the criteria should not be too detailed and can not be too much quantified to fulfil the needs of the project. They shall demonstrate general options for assessment and for design. They guide the user to do his own assessment. This does not require too detailed criteria which do not fit in many cases.

4. The energy study for Luciline: Which criteria can we generate from it

Bénédicte Salle (Rouen Seine Aménagement) gives a presentation on the energy study.

The study assessed the potential of different renewable energy sources for the Luciline site, further investigated on the local requirements and concluded in a precise investment plan. Wind, solar and biomass energy solutions were excluded for the site, as due to the location of the site close to the city, either the potential is too low or the acceptance is poor. Merely geothermal energy has a reasonable potential for Luciline. Comparing deep and near-surface geothermal energy, the near-surface option was chosen for hydrological reasons. For the site, 5 drillings (in about 20 m depth) were chosen with a decentralised heat pump network. Additionally low-consumption residential and office buildings are being built. For the





investment decision the options at the Luciline site are compared with conventional energy solutions concerning investment and maintenance cost, energy and CO₂ label.

The presentation makes clear that a lot of criteria for the energy component are used in the study, e.g. the primary energy consumed. Other project partners have also made experiences with energy criteria which will be brought into the criteria development process. It is mentioned that legal requirements are missing in the criteria lists so far and should be added. Also special criteria (like availability of space for certain measures) are not really part of the catalogue yet.

4. Conclusions for the development of assessment criteria

The discussions and presentations result in the conclusion that the criteria catalogue shall demonstrate the options for solutions and assessment options. The assessment has to combine adaptation and mitigation measures since this is not possible to separate. In their focus on energy, green and blue (as well as urban morphology) these key components always integrate adaptation and mitigation. It should not be tried to develop different catalogues.

The criteria catalogue for energy will be further drafted and discussed in the twinning activity which is planned by different partners (see Working Group 2).

5. Test evaluation in 4/2010

The schedule for the implementation of measures and action plans is reviewed in respect to possibilities for test runs for the assessment in September / October 2010. The following test evaluations seem sensible and will be further planned:

- Green: 2 green roof projects in Nijmegen
- Energy: 1 energy study (a joint approach of WVI, Nijmegen, Hastings, Rouen)
- Water: leper and Tiel East are possibilities
- Urban Structure: The case study on city structures in Arnhem.

The test evaluation will be further developed in cooperation with the partners named.

6. Update of working group planner

Agreement on working steps until the next working group meeting

- A. Work on draft criteria catalogue (IU + PP)
- B. Input for criteria discussion as contribution to the energy twinning (energy criteria catalogue evaluation); (IU, to be discussed in the next twinning)
- C. Preparation of test cases:
 - concept for the test run for Sept 2010 (IU)
 - preparation of test cases (further instructions)
 ARN (green roofs, possibly energy study)
 WVI (water study, energy study is not finished by then)
 TI (water study)
 ARN (urban structure)

Completion

Torsten Frehmann thanks the working group and finishes with the information that Annemieke de Kort (Tiel) will take over as chair in June 2010.



Participants of Working Group 3:

Jos Verweii PP2 Municipality of Arnhem Torsten Frehmann (chair) PP3 Emschergenossenschaft Matthias Stumpe PP3sub Municipality of Bottrop Ton Verhoeven PP5 Municipality of Nijmegen Antal Zuurmann PP5 Municipality of Nijmegen Bénédicte Salle PP6 Rouen Seine Aménag. Ine van den Hurk PP7 Municipality of Tiel José Zickenheiner PP7 Municipality of Tiel Trui Naeyaert PP8 West-Vlaamse Intercomm. Stiin Saelens PP8 West-Vlaamse Intercomm. Vincent Kuypers Alterra, WUR (with PP2)

INFRASTRUKTUR & UMWELT

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Working Group 4

Agenda

- Presentation of communication actions by Emschergenossenschaft
- 2. Summary WG 4 meeting Hastings Status of to do's after 3rd WG meeting

Peter Heiland

Stefanie Greis

- Results brainstorm Hastings integration in best practice data base Link to modules of assessment tool
- 4. Midterm brochure: time schedule, tasks, commitment
- 5. Conclusions and working group planner



The chair of WG 4, Eveline Huyghe welcomes the working group members and explains the agenda. After a presentation the input of WG 4 for the tool will be in the focus.

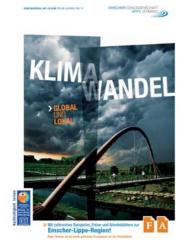
1. Presentation of communication actions by Emschergenossenschaft/Lippeverband



Kirsten Adamczak (Lippeverband) presents an approach for comprehensive stakeholder involvement with spatial planning instruments, based on the example of developing the "Regionalplan for the Metropole Ruhr". Among others the Regional Plan steers the local development of industrial, commercial or settlement sites, meaning consequences for water infrastructure. The capacity or lacks of treatment plants, pumping stations, sewers etc. may become a justification for priorities or determination of building sites.

The water boards as stakeholder have to contribute to the Regional Plan related to many issues, e.g. on flood prevention, storm water management, development of the water related infrastructure. Also, with the update of the





Masterplan "Emscher:Future" the water related aspects for the river catchment are integrated and can be taken into account when developing the Regional Plan.

A second very interesting communication approach is the development of working material for schools targeted at ages 10 to 16. The development process has been supported by teachers from different types of schools securing the viability of the material including e.g. practical work sheets. Material is provided for the whole range of topics such as basic information ("What is climate Change?"), EU politics or local strategies for everyone.

The material will be available on the internet for download within the next months. The working group members will be informed.

2. Summary WG 4 meeting Hastings - Status of to do's after 3rd WG meeting

Eveline Huyghe summarises the status of the work of WG 4. All activities agreed at the 3rd meeting have been conducted and are subject to further discussion in this WG meeting.

3. Results brainstorm Hastings - integration in best practice data base Link to modules of assessment tool

Eveline Huyghe reports that following the brainstorm session at the last WG meeting the results were summarised in a table by INFRASTRUKTUR & UMWELT. The conclusions are:

Main outcome of the brainstorming session is a detailed list of target groups and categories. In the working group the categories and assignments are discussed as well as additions are made. It is agreed that the amendments will be integrated in the list by INTRASTRUKTUR & UMWELT. The revised list will be send to working group members for feedback (check and further additions).

Eveline Huyghe explains that it seemed to be feasible to integrate the results of the brainstorming session concerning aims, instruments and messages in the data base of best practice communication actions and continue to work with this data base. The working group agrees on this proposal. The actual table will be send to the working group members for filling in missing information or clarifying open questions.

Birgit Haupter presents the draft format for the fact sheet of awareness raising measures and possible links to the tool. The fact sheet format is based on the inquiry sheet on communication actions which was filled in by the project partners. The working group members agree that this is a sensible approach. As next step INTRASTRUKTUR & UMWELT will develop concrete examples of awareness raising fact sheets and send them to the working group members for comments. Examples from the Future Cities organisations (and associated organisations, e.g. examples named by the Flemish government representative) which are not directly part of Future Cities can be integrated as well when marked accordingly.

The working group discusses how they would use such a data base and which search functions would be useful. In general the procedure would be first to decide on the target group and then look for adequate communication actions, communication instruments and detailed examples. These requirements will be taken into account when further developing the tool.



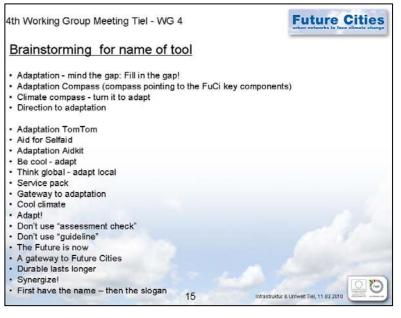
4. Midterm brochure: time schedule, tasks, commitment

Anke Althoff introduces the framework for the 2nd Future Cities brochure. The brochure shall present the available results of the Future Cities partnership on joint products and joint activities - the climate check tool, twinning etc. - and individual results of pilot projects. It is planned to allocate the results of the pilot projects to the different modules of the tool as applicable. This will allow to present the individual results of the pilot projects as well as it will demonstrate the practical information basis of the tool. The tasks of Working Group 4 to accompany the development of the Future Cities communication material are discussed. It is agreed that it is not effective if the whole group edits the brochure. Chantal Lass offers support by the press office of Hastings. The following time schedule and responsibilities are agreed:

- until 30th May 2010 input of project partners to LP
- until 5th July 2010 all texts will be ready in English and will be send to Hastings for checking and to all project partners concerning their individual partner inputs.

5. Name of the tool - brainstorming

In a brainstorming session names for the tool are collected. Out of more then 20 proposals some favourites emerge, such as "Adaptation Compass". The final decision on the name has to be taken for the description in the brochure.



6. Update of working group planner

Agreement on working steps until the next working group meeting

B. Revise/complete best practice data base (and collect further partner actions)

A. Integrate new target groups/categories

C. Complete/follow up on awareness raising

"fact sheets" for tool

D. Midterm brochure

E. Which link of WG 4 to tool are especially important/sensible? From general to special

F. Decision about the name of tool

IU/feedback WG members IU/feedback WG

IU/feedback WG

support by PP4, feedback of PPs on their parts proposal IU/ feedback WG members

Task force/for midterm brochure

Completion

Eveline Huyghe thanks the WG participants and closes the working group session. At the next WG meeting Chantal Lass will take over as chair of WG 4.



Participants of Working Group 4:

Anke Althoff PP1 Lippeverband

Hans van Ammers PP2 Municipality of Arnhem Albert Anijs PP2 Municipality of Arnhem Marion Visser PP2 Municipality of Arnhem

Chantal Lass PP4 Hastings Jane Dodson PP4 Hastings

Helene Mogelhoj
Veroniek Bezemer
Henk Jan Nijland
Thierry Verrier
PP4 Sub-Partner Sea Space
PP5 Municipality of Nijmegen
PP5 Municipality of Nijmegen
PP6 Rouen Seine Aménagement

Annemieke de Kort PP7 Municipality of Tiel

Eveline Huyghe (chair) PP8 West-Vlaamse Intercomm. Nathalie Garré PP8 West-Vlaamse Intercomm.

Ad Koolen VHL - Van Hall Larenstein University (with PP2)

Ron Josten City Region Arnhem-Nijmegen Birgit Haupter INFRASTRUKTUR & UMWELT

Conclusions and Wrap-up

The discussions and conclusions of the four working group sessions are presented to the plenary by the chairs. The working group members are informed about the next steps agreed on in each working group (see previous pages and updated working group planner in the annex).

Anke Althoff summarises the links between the working group results and the input for the tool. She concludes that the aims of the meeting were reached and especially the joint products of Future Cities were brought forward distinctively.

The working group members are reminded of the date of the next (5th) working group meeting, which will take place together with the mid-term conference on

29th September 2010 in Essen (conference day)

28th / 30th September 2010 (Project Steering group /5th Working Group meeting).

The date for the 6th working group meeting which will be organised by Future Cities partner Arnhem is announced to take place at

Anke Althoff thanks Annemieke de Kort and Ine van den Hurk for providing a pleasant and effective working atmosphere for the 4th working group meeting and closes the meeting.





Interactive communication actions

Watergame Tiel East

The Future Cities working group members have the opportunity to try out the water game developed for the project area of Tiel-East. There, renovations and a new city block are planned and an old water system causes problems. The situation generated in the game is actually based on the real situation on site. The aim of the game is to increase the awareness between stakeholders in terms of their interests, roles and measures, thus increasing the change for a better (integral, durable and widely supported) urban planning.



The working group members can play the role of four different stakeholders with differing interests and assignments who should work together making plans for the area. In this example the Future Cities partner take the roles of the municipality, the water board, a social housing company and a project developer. These roles are actually a quite nice mirror of the real Future Cities partnership. The working group members get to know how their acting and attitude influenced the results. The actors in the game are assessed on different indicators:



Social, green, water, housing and finances. Whereas the municipality has to reach high scores in all indicators, the project developer is e.g. only assed on the indicator finances. While playing the game it becomes clear that the stakeholders and actors need to talk to each other and that for best results all actors should contribute to the costs. Also, the Future Cities players confirm that the game provides a good insight in each other's interests.



Map Table

The map table of the municipality of Arnhem and Alterra / Van Hall Larenstein is presented to the Future Cities partners in two sessions during the meeting by Vincent Kuypers (Alterra).

The so-called maptable has been developed by the company mapsup for Dutch cities, regions and also private companies to visualise spatial developments. Based on a GIS-system the user can determine priorities for action for spatial relevant issues like water, green, spatial planning, air quality and more. Now it is tested if the tool can also help to decide on how to deal with the effects of climate change such as urban heat islands.



The map table is mainly a



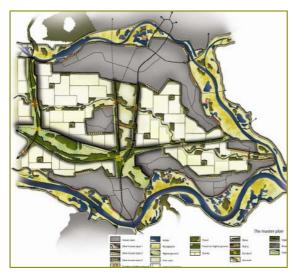
communication and design platform displaying GIS data and maps for illustrative communication. Changes in urban morphology can be drawn on the map table (e.g. planting of trees in a certain area) and the following changes on urban climate are calculated based on predefined scenarios. The use of predefined scenarios is necessary because the comprehensive model which calculates the changes accurately would be too time-consuming for the map table.

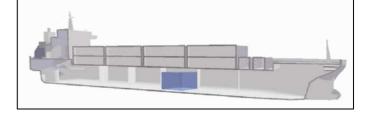
The Future Cities partners test the tool and contribute to the further development. The participants express their main conclusion: "This is a great tool to communicate - it helps planners and decision makers to decide on concrete measures for spatial relevant challenges such as the climate change."

Adaptation concepts for the City Region Arnhem Nijmegen

Ad Koolen from the Wageningen - Van Hall Larenstein University presents studies developed

by international student groups for practically applying the guideline "think global - act local" for the City Region Arnhem Nijmegen.





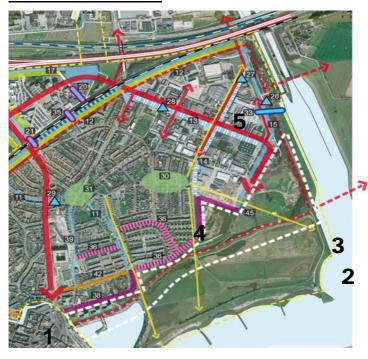
A proposed adaptation concept was inspired by the 'room by room' system of ships. By creating dikes for the infrastructure one gets a simular effect. By creating the compartments an ecological corridor from the north to the south can be produced which will be free of water during flooding periods as well as generate added value for recreational offers.



Site Visit

With the site visit the Future Cities working group members gain insight on the problems and the planned solutions of the project area of Tiel East. Ine van den Hurk informs the participants about the specific challenges of the area to be met by the municipality.

Plan of the area visited:



- 1. Waterpoort
- 2. **Echteldse dijk**Climate dike area
- 3. **Vijverberg**Former waste disposal site. To be redeveloped: cool nature project, housing development.
- 4. Vogelbuurt.
- 5. **Latenstein**reconstruction Industrial area:
 roads, infrastructure,
 waterstorage, vegetation roofs

On tandem bikes – a practical application of the Future Cities working approach of twinning - the group gets to know the area comprising a former waste disposal site to be redeveloped, an industrial area to be reconstructed and a housing neighbourhood with high ground water levels to be solved.



At the Waterpoort (1) a plaquette reminds of the high waterlevel (reaching 10.27 NAP +) in 1995, when Tiel had to be evacuated.





Climate dike area – Echteldse Dijk (2), by broadening the dike on both sites it becomes more stable and offers new possibilities.

The chairs of Working Group 1 cycle on the tandem bike on the public square at "Vogelbuurt" (4). There, to keep the underground in this neighbourhood dry drainage is installed. A watersquare will be used to store rainwater. When the square is dry it can be used to play or park cars.



Following the site visit the Future Cities partnership are invited into the Tiel town hall where Mayor Steven de Vreeze and Corry van Rhee – Oud Ammerfeld welcomed the working group members. In their address they highlight the importance for Tiel to be prepared to the impacts of climate change. Therefore, the work of the international project group is very valuable for Tiel and Tiel also hopes to bring some input into the international group which might provide ideas for other project partners to improve their approaches.



Anke Althoff thanks the town representatives for the warm welcome and points out the value of each partner's work within the transnational project.

With an

information on the possibilities of the so – called "climate dike" development presented by Jan Dirk van Duivenbode from Rijkswaterstaat the site visit is closed.



Annexes

List of presentations (included on CD ROM)

Working group planner WG 1

Working group planner WG 2

Working group planner WG 3

Working group planner WG 4

List of participants

List of presentations (included on CD ROM)

10th & 11th March 2010

Plenary Sessions

- 1_ Intro_Althoff.pdf
- 2_ Concept Climate Check Tool_Haupter.pdf

Working group sessions

- 3_WG1_Status topics_Verhoeven.pdf
- 4_WG1_ climate check tool_IU.pdf
- 5_WG2_Introduction_vanAmmers.pdf
- 6 WG2 TwinningEnergy Anijs.pdf
- 7_WG3 status_topics_Frehmann.pdf
- 8 WG3 Geothermie Salle.pdf
- 9_WG4_ Status_database_Huyghe_IU.pdf
- 10_WG4_Regional_Plan_Adamczak.pdf

Summary

- 11_Summary WG 1-4 chairs.pdf
- 12_Conclusions_ Althoff.pdf

Interactive Communication Actions

- 13 Map table Kuypers.pdf
- 14_Thinkglobal_act local_Koolen.pdf

Site visit

15_Climatedike_Duivenbode.pdf



Working Group Planner: WG1 – Climate Assessment

Meeting n° /date	WG – topics / agenda	Preparation by PP / chair / Input	Output / products of PP (action no. as in application)
2 3/2009	Background: list of direct/indirect impacts (prepared by PP2/Alterra)	□ presentation for WG	■ Report cost-effective low carbon design; 3/PP4 SEERA
	 Review on existing research results (prepared by PP4/SEERA) 	■ finished input for WG, if sensible	■ Report ground water policy plan for adaptation; 2/PP5 NI
	● ROUGH OUTLINE OF ASSESSMENT preparation	◆ Part 1 "Keep dry feet" done; Part 2 "Experimental Building" 2010	■ Report water adapted development; 2/PP7 TI
	table (prepared by chair)	■ Exchange existing information of project partners, determine gaps (organised by chair)	
2bis 6/2009	further discussion of the input papers and reports	■ definition of criteria, presentation for WG 2bis	■ Regional climate change guideline; 5/PP1 LV, PP3 EG
	 Discussion and improvement of the outline ROUGH OUTLINE OF ASSESSMENT 	■ definition of criteria, presentation for WG 2bis draft	■ Report on vulnerability/adaptation examples; 4/PP4 SEERA
3	Discussion of inputs / criteria to the		◆ Climate map of City region UHI; 4/PP2 AR
9/2009	assessment check check list	■ Only draft –very rough version available	■ Rough Outline climate toolkit; 4/PP2 AR
	combination of different inputs	■ Direct input for checklist	■ Regional sustainability guideline wvi; 5/PP8 WV
	PRELIMINARY ASSESSMENT CHECK (LIST)	■ Combined use of energy and groundwater	 Masterplan underground Nijmegen; /PP5 NI (link to report ground water policy plan see above?)
		■ Contribution to assessment check	■ Report /maps for energy measures in urban structures; 3/PP5 NI
		■ definition of criteria, presentation for WG 3	■ Energy study cold/heat storage; 3/PP2 AR
		■ definition of criteria, presentation for WG 3	■ Energy map Arnhem and area with manual explanation; 3/PP2 AR
		■ definition of criteria, presentation for WG 3	■ Report combination green/water in the city (courtyards; roofs, walls) – general part, 1/PP5 NI
4	Concept for elaborating and presentation of	■ List of possible measures to reduce heat island effect	Rough Outline climate toolkit; 4/PP2 AR
3/2010	preliminary assessment check for midterm conference	■ Direct input for checklist	■ Regional sustainability guideline wvi; 5/PP8 WV
	○ PRELIMINARY ASSESSMENT CHECK - CONCEPT	■ Contribution to assessment check	■ Business Plan for "Retrofit Demonstration"; 3/PP4 HA
	(DRAFT, TABLES FILLED IN EXEMPLARY	INPUT FOR WG 2	◆ Plan for local Green Homes Service; 3/PP4 HA

4th Working Group Meeting 10th - 11th March 2010, Tiel



Meeting n° /date	WG – topics / agenda	Preparation by PP / chair / Input	Output / products of PP (action no. as in application)
4 (cont.)		Contribution to assessment check / WG 4	■ Report on state of art green/ water in the city (courtyards, roofs, walls) - details; 1/PP5 NI
3/2010		□ presentation for WG 4	■ Report on climate robust development (energy efficiency, durable energy); 3/PP7 TI
5	Improve assessment check with input from	Working steps until 5 th WG (decided at 4 th WG)	
10/2010	evaluation interim results WG 2 and 3	A. Add categories in fact sheets: scale, etc. IU	
Conf.	PRESENTATION OF PRELIMINARY ASSESSMENT CHECK	B. Integrate available information in fact sheets, ask for missing information, feedback PP IU/PPs	
	CHECK	C. Work out detailed examples of fact sheets for next meeting IU	
		D. Check improve integration of mitigation measures IU/Task force	
		E. User inquiry IU/PPs	
		F. Check integration of "urban morphology" in the tool IU/Task force Feedback on definition to Vincent Kuypers PPs	
		G. Description of tool / PPinput for brochure PPs/ end of May	
		■ Available for City region Arnhem Nijmegen	◆ Climate map of City region UHI 4/PP2 AR
		■ List of possible measures to reduce heat island effect	■ Rough Outline climate toolkit; 4/PP2 AR
6 3/2011	Improve and adjust assessment check	◆ Check: Experiences for participation strategy (WG 4?)	Cooperation with housing companies/other parties 1/PP5 NI
7 10/2011	Improve and adjust assessment check with confirmed evaluation results from WG 2 and 3		
8	Prepare input for final report	■ Including experiences of Future Cities partners	◆ Climate model, adapted, tested in City Region
3/2012	Climate model as one building stone of assessment check		4/PP2 AR
9 6/2012	FINAL RESULT INPUT REPORT		Synthesis report of possible options for combined measures 4/PP6 RS
11/2012 Conf.	FINAL ASSESSMENT CHECK/ PRESENTATION		



Working Group Planner: WG2 - Action Plans

Meeting n° /date	WG – topics / agenda		Preparation by PP / chair / Input		Output / products of PP
2 3/2009	 Definition of "Action Plan" (vrs. Master Plan, other terms); (prepared by WVI) Examples for actions: (1) green roofs (prepared by NIJM) 	•	presentation of the status for WG on going	•	Feasibility study groundwater and 3 action plans on climate adapted use of groundwater for more energy efficiency; (PP5 NI)
	 Which information is needed in which phase by whom? (prep. by ARNH) ☐ ISSUE FOR TWINNING 	▼	presentation of the status for WG	▼	Feasibility for replacing coal with shredder fibres for sludge dewatering in at the waste water treatment plant; (PP3 EG)
	 Outline of the Heat Island Study (prepared by ARNH) presented Twinning concept and schedule (WG chair) 				
3 9/2009	Definition of criteria for the evaluation report for twinning actions	◀	Report on twinning activities (PP, chair)	•	Jointly designed action plan for a climate friendly industrial zone (EG/Bottrop); (PP3 EG)
	 Paper on twinning approach (prepared by chair/ IU) Discussion / Improvement of Formats: twinning report/ twinning search (prepared by chair/ IU) Review on 1 twinning action (prepared by chair and PP) 	contribution to the definition of evaluation	•	Integrated plan to face climate change and for a sustainable industrial park (EG/Bottrop); (PP3 EG)	
		•	Implementation programme for roofs combining green structures and water management for an industrial zone (Tiel-East); (PP7 TI)		
	 Concept and agreement for next twinning activities 4 twinning reports on the improvement of the action plans 	~	resentation of the status for WG		A feasibility study on wateradapted and energy efficient development in Tiel East; (PP7 TI)
4 3/2010	Concept for Evaluation report on twinning actions, results, messages (and organisation) prepared and discussed	◀	Revise twinning report formats (also revise request format, if necessary) (IU/chair); adapt report of 1 st twinning accordingly (PP8)		
	 Presentation (PP 8) on 2nd twinning activity PP2/PP4/PP8 on energy strategy); another was 	◀	Report / presentation on twinning actions (PP2/PP4/PP6/PP8)		
	cancelled (PP2/PP6 on energy strategy/building techniques and	4	Prepare presentation of status and progress of twinning reports (chair with PP2/PP4/PP6/PP8)		

4th Working Group Meeting 10th - 11th March 2010, Tiel



Meeting n° /date	WG – topics / agenda		Preparation by PP / chair / Input		Output / products of PP
4(cont.) 3/2010	Outline of evaluation report	▼ ▼	Prepare concept for evaluation (IU / chair) Input about green roofs from Rouen and WVI to Nijmegen (PP6/PP8/PP5); present further results of Green roofs study in Tiel (PP5)		
		•	Presentation of the status	•	Integral design plans of combining green structures with water retention in public city courtyards (Nijmegen); (PP5 NI)
		•	Topic for twinning activity	•	Feasibility study/action plan for renewable energy measures in the district of Luciline; (PP6 RS)
		◀	Topic for twinning activity	4	Energy strategy for Arnhem including a report with concepts/ measures/ SMART targets per type of urban project; (PP2 AR)
		◀	Presentation of the status	•	Action plan for implementation of green structures with water retention (Nijmegen); (PP5 NI)
		4	presentation of the status (was presented at 3 rd WG meeting)	◀	Action plan for the use of energy roofs including energy saving/production, green roofs and water retention; (PP5 NI)
5 10/2010	 further development / improvement of the criteria concept improvement of test evaluation method twinning reports presentation and discussion of twinning results 	◀	Working steps until 5 th WG meeting (decided at 4 th WG meeting) • Twinning requests and activities - green roof and biodiversity (RO) - energy / adaptation issues in urban design - energy strategy for 0-CO2 in Arnh		
	 ■ INTERIM EVALUATION REPORT FOR TWINNING ACTIONS ■ 5 twinning reports on the improvement of the 		- implementation of energy strategies (Arn)		Energy sity man with heat practices evenues to
	action plans	 input to evaluation report; presentation of examples exemplary evaluation 	•	Energy city-map with best practices examples to disseminate results - support awareness raising; (PP5 NI)	
		◀	Map and Toolkit: presented to WG	•	Checklists/handouts for project developers (Arnhem); (PP2 AR)
		•		•	Concepts for adapting water infrastructure to climate change with green spaces (feasibility studies, architectural concepts, plans; (PP6 RS)

4th Working Group Meeting 10th - 11th March 2010, Tiel



Meeting n° /date	WG – topics / agenda	Preparation by PP / chair / Input	Output / products of PP
		•	■ Scenarios for reconstruction sites; (PP2 AR)
6 3/2011	 twinning reports presentation and discussion of twinning results	 presentation of the working plans 	■ Detailed working plans (PP8 WV)
7 10/2011	Preparation of the evaluation report 4 twinning reports on the improvement of the action plans	■ presentation of the status	 A climate proof master plan for leper Oostsector (WVI); (PP8 WV)
		■ presentation of the status	■ Evaluated planning to see, if ecological planning complies with improving the climate proofness of cities (Kamen); (PP1 LV)
		■ presentation of the status	■ 4 twinning reports on the improvement of the action plans;
8 3/2012	Evaluation report of partner experiences; to improve the preliminary check WP1; use for spreading integrated results <i>Future Cities</i> in WP4 action 16.; WG 2 EVALUATION REPORT	■ presentation of the status	■ An example climate change adaptation plan (strategy and implementation plan) for a city; (PP4 HA)
		■ presentation of the status	■ Map of the City Region Arnhem Nijmegen with bottlenecks and opportunities to reach a climate proof region; (PP2 AR)
		■ presentation of the status	■ Toolkit "city climate": mo¬dels, guidelines, road¬maps for municip. to estimate effects of climate change, effective measures; (PP2 AR)



WG 2: List of possible twinning activities (as proposed during project development)

Action	Activity	Activity name	PP	"Twin"	Reports	Comment/Status
2.6	2.6.1	Check "climate friendly planning"	1	5	By PP 1	
	2.6.2	Feasibility studies and action plan	5	1	By PP 5	
	2.6.3	Concepts for water flood manage	6	2	By PP 6	
	2.6.4	Translation ideas on plans with ur	6	2	(1 report by PP 6)	
	2.6.5	Implementation programme	7	3	BY PP 7	Twinning event Sept. 09, report written
2.7	2.7.1	Measures in the water system	3	7	BY PP 3	
	2.7.2	Feasibility to reduce fossile energy	3	7	(1 report by PP 3)	
	2.7.3	Renewable energy research, for	6	2	By PP 6	
	2.7.4	Feasibility studies and action plan	5	1	By PP 5	
	2.7.5	Feasibility study 'Wateradapted	7	3	BY PP 7	
2.8	2.8.1	Sustainable development of indu	3	7	BY PP 3	Twinning event Sept. 09, report written
	2.8.2	Energy strategy Arnhem	2	6	By PP 2	Twinning per email 2009, report written
	2.8.3	Scenarios for the reconstruction	2	6	(1 report by PP 2)	
	2.8.4	Building a toolkit 'city climate'	2	6	(1 report by PP 2)	
	2.8.5	Feasibility studies and action plan	5	1	By PP 5	
	2.8.6	Development of a master plan for	8	4	By PP 8	Twinning event Sept. 09, report written
	2.8.7	Adaptation policy and implement	4	8	By PP 4	
3.10	3.10.1	Transformation of roofs/walls, city	5	1	By PP 5	
	3.10.2	Realisation of green roofs in the	7	3	By PP 7	
	3.10.3	Development of sustainable quarter	8	4	By PP 8	Twinning per email 2009, report written
	3.10.4	Adapted water infrastructure with	6	2	By PP 6	
	3.10.5	Ecological transformation of a water	1	5	By PP 1	
3.11	3.11.1	Planning for measures in the water	3	7	By PP 3	
	3.11.2	Potential for substitution of fossil	3	7	(1 report by PP 3)	
3.12	3.12.1	Sustainable development of indust	3	7	By PP 3	
•	3.12.2		5	1	By PP 5	
		Retrofit' of existing poorly insulate	4	8	By PP 4	Twinning per email 2009, report written
		Innovation exchange building Env	4	8	(1 report by PP 4)	3 F = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =



Working Group Planner: WG3 – Implementation of combined measures

WG - meeting n° /date	WG – topics / agenda	_	Preparation by PP / chair / Input	_	Output / products of PP
3 10/2009	 Concept for the evaluation: process of evaluation, criteria etc. Restraints for measures (WVI) Twinning concept (also check with twinning concept in WG 2) 	•	presentation of the status of the implementation measures		Interim results are not finished in this phase)
4 3/2010	 Concept for the evaluation (test run 2010) each PP: national view on framework conditions for projects on climate change each PP: identify 2-3 actions that can serve as test case for the evaluation test in 2010 Energy criteria Monitoring of green roofs: Why, how and what: (NIJM) 	4	Develop evaluation criteria (success, failure): RO: geothermal measures NI: green roofs Prepare presentation of the evaluation criteria for the pilot actions (chair / IU) PP: identify test actions	▼	Demonstration/Training exemplar installed for retrofitting buildings to climate change; (PP4 HA) Outline / concept and interim results of Monitoring report (PP5 NI) Start: transforming roofs, input WP2 / -2010 (PP7 TI)
5 10/2010	 Preparation of test evaluation (interim evaluation, test evaluation) of measures selection of exemplary measures to be evaluated 	•	Working steps until 5 th WG meeting (decided at 4 th WG meeting) Work on draft criteria catalogue (IU+PP) Preparation of test cases: - concept for the test run for Sept 2010 (IU) - preparation of test cases (further instructions) ARN (green roofs, possibly energy study) WVI (water study) TI (water study) ARN (urban structure)	•	Transformed urban sewer water system at a wastewater treatment plant for energy efficiency by substitution of fossile energy (EG); (PP3 EG)

4th Working Group Meeting 10th - 11th March 2010, Tiel



WG - meeting n° /date	WG – topics / agenda		Preparation by PP / chair / Input	_	Output / products of PP
		•		•	"Kamen" Interim result (PP1 LV)
6 3/2011	1st evaluation (interim check) Presentation of the test evaluation	•	identify took oppose for the interior	◀	Implemented solutions green structures and water retention: 2.000 m² green roofs, 1.000 m² green walls, 2 public courtyards 2 ha (Nijmegen, NL); (PP5 NI)
		◀	 identify test cases for the interim evaluation; contribution to the evaluation from the pilot actions 	•	Built innovation exchange building with combinations of all measures for excellent performance; (PP4 HA)
		•		•	Monitoring reports: ground water effects on buildings/ energy savings; green structures on energy savings/water retention, heat effects; (PP5 NI)
6bis	Discussion paper (interim check) WG 1, WG 2	◀	Interim result of transferring	•	
6/2011	1 report on the results of the twinning assessment			•	
7 10/2011	Review of interim evaluations Treports on the results of the twinning assessment	4	input the evaluation report		Sustainable industrial area; e.g. green roofs, facades with renewable energy and rainwater disconnection in Bottrop; (PP3 EG)
8 3/2012	Preparation fo the final evaluation report: con¬clusions for improvement of the preliminary check of WP 1, of action plans and for use in awareness raising; WG 3 5 reports on the results of the twinning assessment	4	input the evaluation report	•	Implemented measures for sustainable and climate proof buildings (planned: 10 different measures incl. monitoring); (PP5 NI)
		•	input the evaluation report	•	Ecologically improved water body in Kamen to improve city micro climate, length 2,14 km (Kamen, DE); (PP1 LV)
9 6/2012	FINAL RESULT INPUT REPORT	•	Evaluation	•	20 transformed roofs in an industrial site, 7.500 m² (Tiel-East, NL); (PP7 TI)
		•	Evaluation	•	Implemented parts of a sustainable and climate-adapted master plan; citizens to learn about sustainable adaptation; (PP8 WV)
		•	Evaluation	•	Multifunctional water infrastructure which is prepared to cope with climate change impacts, 5.000 m²; (PP6 RS)



Working Group Planner: WG4 – Targeted Awareness Raising

WG - meeting n° /date	WG – topics / agenda	Preparation by PP / chair / Input	Output / products of PP and dates
2 3/2009 3 10/2009	 Send results of questionnaire (= collection of measures) to WG members to add what's missing Make compilation of all measures, assess As a result: joint list of good practices of the partners 	 ◀ ✓ preparation of reports on status of the activities prepare good practice examples 	 ■ "Wonen ++" / Nijm / Energy saving advice for citizens, 2008 (PP5 NI) ■ Forum discussions Nijmegen, 2007 (PP5 NI) ■ Nijmegen energy agreement, 2008 (PP5 NI) ■ Climate campaign / Citizens of Nijmegen, 2008 (PP5 NI) ■ Brochure Tiel East, 2008, Target groups: residents, external parties (promotion) (PP7 TI) ■ Information of members of LV and EG about effects of climate change and options. Set up an action plan in regional consensus. (PP1 LV, PP3 EG) ■ Website Tiel East 2008 newsletters 2009 – 2012 (PP7 TI) ■ Tiel game 'living with water', 2008 / 2009; Target groups: project developers, residents, decision makers, water boards, etc. (PP7 TI)
4 3/2010	COLLECTION OF COMMUNICATION ACTIVITIES OF PP Gain more insight of the "water game" by Tiel Monitor communication strategies (on going) Link results of matrix to module 5 of assessment check LIST OF COMMUNICATION MEASURES (AIM, METHOD, MESSAGE)ASSIGNED TO TARGET GROUPS AND ADAPTATION OPTIONS	Matrix: target groups, aims, methods, messages – sum up results from 3 rd WG meeting, develop readable form (prepared by IU / chair) Send matrix to WG4 members for additions (chair / additions by WG members) Integrate additions (IU / Chair) Concept to link results of matrix to module 5 of assessment check and the data base of best practices (IU / chair) preparation of reports on status of the activities prepare good practice examples	 Innovation exchange: project website, blog-overall project brand, complete by end 2009; sea space PP4sub HA) Forum / Network: Sustainable Construction + Environmental Technologies, commence → Nov. 2009

4th Working Group Meeting 10th - 11th March 2010, Tiel



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			(PP4 HA)
			■ Sustainable Construction Conference, Oct. 2009 PP4 HA)
			■ Training for individuals and businesses: "Eco-retrofit" + "Training" video; Sept. 2009 (PP4 HA)
5 10/2010	Integration of best practice communication strategies in the "climate check tool"	Working steps until 5 th WG meeting (decided at 4 th WG meeting)	
Conf.		A. Integrate new target groups/ IU/feedback WG categories	
		B. Revise/complete best practice IU/feedback WG data base	
	BEST PRACTICE COMMUNICATION STRATEGIES OF PP	C. Complete/follow up on IU/feedback WG awareness raising "fact sheets" for tool	
		D. Midterm brochure by PP4, feedback of PPs – edited English texts on their parts	
		E. Which link of WG 4 proposal IU/ feedback WG	◆ Site visits, 2010 – 2011 (PP8 WV)
		to tool are important? F. Decision about Task force/	▼ Further complementary outputs as stated in the communication plan, 2008 – 2012
		the name of tool for midterm brochure	■ The results of action plan on energy measures on buildings are communicated to the citizens, PP5 NI, June / 2011
6 3/2011	Focus on participation strategies		■ Cooperation with housing companies/other parties action 1/PP5 NI
7	Best practice participation strategies		■ Disconnection at Heerener Mühlbach, 2011
10/2011			Information flyer produced, article placed, (PP3 EG)
			■ Awareness leaflet, Hastings, 2011 (PP4 HA)
			■ Sustainable construction conference Oct. 2011 (PP4 HA)
8	Prepare communication input for final		■ Information sessions (2 or 3)
3/2012	report		Information counter (1), 2011 – 2012 (PP8 WV)
	Support editing of final report		 Citizens, persons concerned with construction work are informed about innovative techniques (of storm water





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				disconnection), 1 / 2012, (PP3 EG)
			•	Information sessions – on possibilities in the water system (with inhabitants next to Heerener Mühlbach), 2 /2012, (PP3 EG)
			•	Information brochure, 2012 (PP8 WV)
			•	Activities targeted at university students, school children Nov. 2012 PP4 HA
			•	Rouen: Partnership with the "Maison de l'Architecture" to elaborate exhibition materials / brochure(s) / slildes / presentations(s) on the topic of "adapting the architecture in Luciline" to climate change: 2009 – 2010 – 2011 (Note: Maison de l'Architecture: association of architects, firms and institutions interested in promoting architecture. Rouen Seine Aménagement is a member of it)
11/2012 Conf.	COMMUNICATION AND PARTICIPATION STRATEGIES FOR ADAPTATION — PRESENT			

Participants 4th Working Group Meeting

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Vincent Kuypers Alterra, WUR (with PP2)

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