Grant agreement no: 265114
Seventh Framework Programme

Project acronym: URGENCHE

Project full title: Urban Reduction of GHG Emissions in China and Europe

Deliverable: D1.2

Title: Report on Supply-2020 & Demand-2020 Assessment Workshop

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August 2013

Start date of project: 1 September 2011
Duration: 36 months

URGENCHE / WP1 (Coordination) D 1.2

Supply-2020 & Demand-2020 Assessment Workshop, Basel, Switzerland, 15-17th August 2013

Contents

1. Project wiki: OPASNET

All project management, and many scientific activities appear on the project wiki, OPASNET wiki: http://heande.opasnet.org/wiki/Urgenche
[Password protected]. Upon request to the project manager, Nicky Cocksedge, we can provide usernames and passwords.

Presentations from the Basel workshop appear on the wiki, as follows:

Methodological Presentations from the workshop

- WP2 Energy Balances - *Sandra Torras Ortiz*
- WP2 Energy Balances - *Jouni Tuomisto*
- WP3 GIS City - *Zena Wood*
- WP4 Building Stock - *Marjo Niittynen*
- WP5 Urban Traffic - *Menno Keuken*
- WP6 Exposure, Health & Well-Being - *Pierpaolo Mudu*
- WP6 Exposure, Health & Well-Being - *Rosemary Hiscock*
- WP6 Exposure, Health & Well-Being - *Myriam Tobollik*

City Presentations from the workshop

- WP7 Suzhou City - *Haikun Wang/Miaomiao Liu*
- WP8 Xi'an City - *Xiaochuan Pan*
- WP9 Basel City - *Laura Perez*
- WP9 Basel City - *Stephan Trueb*
- WP10 Kuopio City - *Arja Asikainen*
- WP11 Rotterdam City - *Willem-Jan Okkerse*
- WP12 Stuttgart City - *Manfred Wacker*
- WP12 Stuttgart City - *Sandra Torras Ortiz*
- WP13 Thessaloniki City - *Denis Sarigiannis*

Other Presentations from the workshop

- Introduction - *Nino Kuenzli*

2. Meeting Agenda

Urban Reduction of Greenhouse gas EmissioNs in CHina and Europe (URGENCHE)

Supply-2020 & Demand-2020 Assessment Workshop, 15-17th August 2013

University of Basel, Collegiate Building (Kollegienhaus), Petersplatz 1, 4003 Basel, Switzerland

Programme

Time	Item	Presenter/ chair
Thursday 15th August **Room: Regenzzimmer 111**		
11:45	REGISTRATION – Buffet lunch available	
12:00	Welcome, programme of meeting	CS/NC
12:10	Welcome from hosts	Hosts
12:20	City update – WP7 Suzhou - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	HW/ML
12:45	City update – WP9 Basel - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	LP
13:10	City update – WP11 Rotterdam - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	WO
13:35	BREAK	
14:00	City update – WP8 Xi'an - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	XP
14:25	City update – WP10 Kuopio - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	AA
14:50	City update – WP12 Stuttgart - Update on progress, to include definition of the future scenarios (Supply & Demand 2020)	MW/ST
15:15	Round up discussion	
16:15	CLOSE – travel to city	
17:00-18:30	Reception by the Governor Ch. Brutschin followed by City Hall Visit	
19:30	Dinner organized by Swiss TPH	

Friday 16th August		
Room: Regenzzimmer 111 + Seminar rooms 210 & 211 for breakout sessions		
09:00	WP6 Exposure, Health & Well-Being - Update on WP6 work, and a training session on tools & methods for health and well-being impact assessment	PM/RH/MT
09:45	Round table group discussion on health and well-being impact assessment lead by WP6, with feedback from cities	
10:30	BREAK	
11:00	WP2 Energy Balances - Update on WP2 work, including the Urban Balance analysis tool	ST/JT
11.30	Session A, Breakout group discussions on Traffic, Buildings & Energy - Cities/WP6 members to join group specified on list	
12:15	WP3 GIS City - Update on WP3 work to include GIS methodology and tools update/training.	ZW
12:45	LUNCH	
13:45	WP4 Building Stock - Update on WP4 work, & their support of cities in housing/buildings/indoor environment assessments	MN
14:15	Session B, Breakout group discussions on Traffic, Buildings & Energy - Cities/WP6 members to join different group (see list)	
15:00	BREAK	
15:30	WP5 Urban Traffic - Update on WP5 work including development of the general GIS-Traffic methodology	MK
16:00	Session C, Breakout group discussions on Traffic, Buildings & Energy - Cities/WP6 members to join different group (see list)	
16:45	Round up discussion	
17:30	CLOSE	
19:30	Dinner (self-organised, ideas for places to eat will be proposed)	

Saturday 17th August		
Room: Regenzzimmer 111		
09:00	Project Advisory Board feedback to Consortium	MD
10:00	Project Management Team meeting (1 person per partner)	CS/NC
12:00	CLOSE	
14:00-21:00	For those available: social event/excursion organised by Swiss TPH in the afternoon followed by swim and dinner	

3. Meeting Minutes

<u>Supply & Demand 2020 Policy Workshop, Basel</u>
<u>15-17th August 2013</u>

Please note: all presentations referenced below can be found on the Basel workshop page of the wiki, accessible from the main page, or via the following link:
http://heande.opasnet.org/wiki/Urgenche:_Supply_%26_Demand_2020_Policy_Workshop

As a lot of information is contained within these presentations, the notes below detail only the discussions and questions relating to them.

<u>Day 1 – Thursday 15th August</u>

Presentation: WP7 Suzhou City – Haikun Wang/Miaomiao Liu

Haikun Wang: This well-being survey data is based on a paper survey of 200 people, and the 1-7 scale shown is based on the WHO guidelines.

Clive Sabel: Good to see lots of progress in the last six months, particularly with HIA assessments and well-being work.

Nino Kunzli: You've shown the weighted exposure for 2007 – how is this weighting derived?

Answer: We look at the time spent in each micro-environment (home, office etc). For every district in Suzhou we also look at the balance of age groups, gender etc, and compare these with the population as a whole.

Nino Kunzli: we should not always use weighted exposure – risk assessments should be done the same way in all cities using ambient concentrations.

Clive Sabel: Miaomiao & Haikun need to discuss this further with Marco to make sure we're being consistent.
Action: *University of Nanjing to discuss use of weighted exposure with WHO.*

Rainer Friedrich: In European cities we define BAU as what will happen if there are no more government changes from today. This seems different from your scenario as you include structural changes and improvements in energy intensity that will happen with current trends. In our case, the reference case has a different definition.

Answer: Yes, we assume low structural changes from today.

Menno Keuken: I liked your approach, but would like to see more of the data, as we have been struggling to get hold of air quality data.

Clive Sabel: Cities should not be working on their own, and we need to share data.

Jouni Tuomisto: I would like to see more detailed descriptions of what is included in your scenarios.

Matti Jantunen: The baseline scenarios need to be done in a very similar way everywhere so we can compare.

Clive Sabel: We agreed in the last meeting that this would be very difficult.

Michael Depledge: You showed information on the amount of time spent outdoors – is this different or similar to the other cities?

Clive Sabel: We haven't surveyed all cities, but there is a lot of international literature on this.

Matti Jantunen: The difference between the average time people spend indoors and outdoors actually varies very little worldwide.

Presentation: WP9 Basel City – Laura Perez/Stephan Trueb

Clive Sabel: You're basing all your exposure estimates assuming people are exposed at the entrance to their buildings. We know c.60% of people's time is spent at home. This introduces error for the remaining 40%, but there is no better way at the moment, unless we use GPS to track people's movements when they're not at home.

Nino Kunzli: We stick to home/outdoor exposure for risk assessment as this is where the main exposure is.

Rainer Friedrich: The health impact assessment is mainly looking at elemental carbon?

Answer: Yes, for people living near roads.

Rainer Friedrich: This misses a number of impacts for things that don't affect EC as much.

Menno Keuken: EC is still a very good indicator for traffic for local measures. Transport in cities is driven by motorways through cities, and we are mainly looking at the inner urban roads, so are only seeing small impacts. If electric cars are on motorways we will see more impact.

Michael Depledge: Have you measured ground level ozone in the city, as this causes respiratory disease & is linked to CO_2? Also, do you have any information on access to green and blue spaces?

Answer: We have ozone data but have not really looked at it, as it is a very tiny fraction compared to others. For green space it is not so relevant to Basel as not much development planned, but may be relevant to other cities.

Clive Sabel: There are a lot issues with things external to cities such as airports which we've made a decision not to include.

Simon Kingham: Restricting studies purely to deaths is missing out on a lot.

Presentation: WP11 Rotterdam City – Willem-Jan Okkerse

Marco Martuzzi: You asked if a small change in NO_2 will be relevant to health, and we need to discuss this further. You also mention changing focus and looking at waste heat. This would open up a range of issues.

Answer: I agree that we should focus on interventions with big effects, so will not really look at the waste heat.

Rob McConnell: You said the port accounts for a certain percentage of PM, but you didn't mention it much for CO_2?

Answer: The industrial zone, which includes the port, is by far dominant for CO_2, and several studies have shown that the port is not that important for PM.

Menno Keuken: 90% of work in heat stress activity is related to well-being. No measures are foreseen, it is just a discussion point for adaptation.

Presentation: WP8 Xi'an City – Xiaochuan Pan

Matti Jantunen: The air quality in Xi'an was terrible when we visited. When we walked around particularly downtown, it seemed the problem was all the home or small business coal-burning stoves and chimneys, as in London many years ago. I don't think traffic is proportionally the biggest problem, more this small-scale coal burning.

Clive Sabel: What are your scenarios for Xi'an (not data)?

Answer: We only defined scenarios for traffic, not energy. We updated to the National Emissions Standards of China as we feel this is important. For BAU 2020 we expect almost double the amount of cars to meet the green label standard.

Clive Sabel: When we were in China most of the cars were very new, so the problem is not due to inefficient cars, but too many cars, plus the coal burning on top.

Sandra Torras: They are planning to extend the metro, and our PhD student Ganlin is analysing this for the project.

Clive Sabel: This might be more appropriate to test, and Stuttgart should collaborate with Xi'an on this.
Action: *University of Stuttgart to collaborate with Xi'an contacts regarding the metro.*

Simon Kingham: Are you testing the right scenario? If all cars become non-polluting, will this help, considering the issue with the coal burning?

Liqun Liu: As far as I understand we have many policies in Xi'an to improve air quality, so the goal we can achieve is BAU 2020?

Clive Sabel: We understand this is difficult for you as you are so far from Xi'an and new to the project Liqun. We need to know what are your real scenarios that you want to evaluate. What Xi'an want to do, not what it should do, and then we test those policies for their health impacts.

Marco Martuzzi: We've been asking what is the methodology and there is no straight answer for this. From our side, it is also difficult if we ask what your policies are. We therefore need to work together to decide these realistic scenarios and attach the methods, and this is what we've done for most of the European cities.

Liqun Liu: If BAU is based on what Xi'an already wants to do, they want all cars to reach the limits by 2022, about 50-60% decrease from the reference values.

Clive Sabel: We have to evaluate what they really are going to do, not what they want to do, and it is not our place to say whether this is realistic.

Neil Morisetti: This city may be a BAU city compared to some of the other cities, as very under-developed in this side.

Clive Sabel: It is not Menno's job to do Xi'an's modelling, and we will discuss how best to help you. The main message is that there are many people here that can help your work.

Presentation: WP10 Kuopio City – Arja Asikainen

Clive Sabel: Although using different measures, this mirrors what was found in Basel.

Simon Kingham: Is one of your scenarios that you reduce peat burning in district heating and have more separate burning using wood? In Christchurch we've been trying to get rid of wood burners. You can't put a clean wood burner in.

Answer: Our scenario is to change the mix, not the energy produced. In the small number of cases that use oil & wood, we're just removing the oil so they are wood only.

Menno Keuken: How will they simulate the move from Euro 4 to Euro 5?

Answer: We know this is unrealistic, it is used only to calculate PM.

Rainer Friedrich: I'm surprised by the Euro classification – why do we assume Euro 3?

Answer: We have quite old cars in Finland.

Niko Karvosenoja: Maybe if you wanted to make the wood scenario more realistic or relevant you could look at the impact of supplementary wood heating.

Clive Sabel: We're talking about wood burning for domestic heat, but in more rural areas they use quite a bit for saunas – are there any studies on this?

Answer: Wood saunas are insignificant in these terms, and wood is also often local, not bought.

Marco Martuzzi: I think when you say you want to refine impact estimates, it would be interesting to use the data you have to see what the deviation is from what can legitimately be used, compared to what you have. You have data you can use to make a start on this, and I think it could be useful to have a go.

Clive Sabel: For Kuopio & Basel, the adverse health effects are so minute unless we use a really severe scenario, so it may be better to look at positive health effects. This could yield better data to show to policy makers, rather than showing 1 death per year – saving 14 months in a hospital bed saves a lot more.

Michael Depledge: Savings to health services would be a better thing to capture. We also haven't talked much about demographic change in the cities we're looking at. If the age distribution changes, this makes a big difference in a heat wave for example.

Nino Kunzli: There is an issue that we deal with small changes with cities with a long history of going in the right direction. We can add additional things that make sense for a lot of reasons, but we also need to find a way to deal with even very small differences.

Michael Depledge: We have to present it in a context.

Nino Kunzli: It will be very important to have Chinese cities with similar scenarios, as they are in a position to make big changes.

Clive Sabel: Basel & Kuopio case studies are similar and need to be written up show that it won't make a big difference, but have a bigger comparative story to show big changes can be made in China for example.

Presentation: WP12 Stuttgart City – Sandra Torras Ortiz/Manfred Wacker

Due to an over-running schedule, there was no time for questions after this session.

Day 2 – Friday 16th August

Presentation: WP6 Exposure, Health & Wellbeing – Pierpaolo Mudu/Rosemary Hiscock/Myriam Tobollik

Simon Kingham: When you assess a city e.g. dose response, do you assume the pollution is the same across the whole city, as variation within cities is as great as variation between cities?

Answer: Yes, it is a balancing act. For Chinese cities with their overall higher levels, extrapolating as you would in a European city would give debatable figures.

Menno Keuken: We work out an average, so we do use the details from air quality assessments but difficult to separate out.

Michael Depledge: Can you tell us more about the pollutants you are measuring? Does this include contaminated land, food & water in cities?

Answer: We have reviewed & compiled quite a comprehensive list in the early stages of the project, and are looking at a lot of things, but have mainly looked at those that are GHG-related. This list includes pollutants which have not been mentioned much since. The list is long, and we didn't identify relevant evidence on land, food or water.

Michael Depledge: I was thinking of China where contaminants in food have been a major issue.

Clive Sabel: We've had to put some boundaries on things.

Matti Jantunen: If a climate policy has profound impacts on metal exposure or contamination it should be looked at, but this has not been obvious. We separate out risk assessment and risk management for particulate exposure, which is one of the biggest things we are looking at.

Neil Morisetti: Are you able to measure the negative effects of climate change policies e.g. some people think removing cars constrains them, green electricity costs more etc.?

Rosemary Hiscock: We have looked at both positive & negative effects.

Rainer Friedrich: In Stuttgart we will attempt to calculate this as utility losses e.g. being forced to use bikes due to unhappiness with the tax costs of cars. We can then get a monetary value for utility loss.

Clive Sabel: There is a constant tension between traditional evidence-based epidemiology and well-being work. Well-being is much less evidenced, and we're trying to get it best evidenced. People's responses to things such as transport nodes are less evidenced.

Nino Kunzli: Basel is a good example – one part is building a tunnel, and there is not large agreement for it, particularly in that neighbourhood, which affects well-being.

Simon Kingham: The greatest impact on well-being is not necessarily air pollution – when air pollution is lower, do people actually complain less, as this addresses one of your assumptions.

Clive Sabel: Our group is largely a traditional epidemiological air-pollution based team, so it is difficult to address the well-being side.

Michael Depledge: I strongly feel what you're doing with the well-being aspect is great. You have 7 cities and know their AQ & GHG emissions, but do you know the well-being of these cities? Can you rank them and compare that with the emissions?

Clive Sabel: We have European level surveys & our own individual level surveys which are unfunded.

Marco Martuzzi: From the literature comparisons are extremely difficult as the same question can mean different things depending on where you ask. Other predictors can be looked at. I agree that our list of assumptions isn't perfect. Air pollution is not the best but these links exist and these are entry points to well-being.

Nino Kunzli: We should work on writing up the limitations and challenges of what we do next, rather than doing everything. We had people working on air pollution and annoyance 10 years ago and this was not useful. We gave up as a certain percentage of people are unwell and complain no matter what. We have a lack of correlation between time exposure and reported annoyance. Questions on traffic are still not good, but noise is better.

Rainer Friedrich: What is the correct parameter – it cannot be air pollution as you cannot see or feel it.

Clive Sabel: You can in China.

Rainer Friedrich: Even in China you cannot see $PM_{2.5}$. You do not feel or see the level of air pollution so your well-being cannot be affected by it, unless you get some outside information. You may get upset if told the limits have been exceeded. We can transfer noise levels into annoyance levels, there are equations for that, so these are perfect for well-being measurement.

Clive Sabel: We are focussing on things we have traditionally measured quite well, but in terms of well-being they don't drive the agenda – we need to measure different things.

Matti Jantunen: I disagree about annoyance in air pollution, as exposure to combustion related air pollutants are fairly well related to personal annoyance in studies in Helsinki. In Kuopio, when the wind comes from the direction of the power plant, the bitter smell from aerosol air pollution is a real annoyance. Some days there is a haze – that is $PM_{2.5}$ and you cannot see across the lake – this gives a significant impact on well-being.

In the tunnel example, most in Basel do not care, but there are small vocal sub-groups that live local to the tunnel and are heavily affected. We should really try to look at qualitative non-parametric methods.

Clive Sabel: Marco and I have that background statistically, but the project does not have the capacity.

Willem-Jan Okkerse: In Rotterdam, the general public are not aware of the distinction between air pollution from factories and that from traffic. Usually complaints are about smells from factories, so surveys may not be linked to air pollution as such. Ranking the cities was suggested, but a lot of complaints come from areas that are objectively clean, and cleaner areas may often have the most complaints, both for noise and air pollution. Air pollution is going down significantly, but complaints have not gone down, so I think there are big issues with these surveys.

Michael Depledge: You wouldn't necessarily expect a correlation between air pollution and well-being as it is about perception, unless people are starting to feel ill from breathing in a lot of traffic fumes for example. Perhaps we go truly qualitative and do narrative analysis of stories from all cities.

Nino Kunzli: We will never reduce pollution to that extent and we are heading for many cities with minute changes related to climate change policies.

Presentation: WP2 Energy Balances – Sandra Torras Ortiz/Jouni Tuomisto

Clive Sabel: It was never envisaged that we would integrate into a common platform.

Rosemary Hiscock: There was talk previously about having something for the cities to use.

Clive Sabel: This isn't something simple on the internet, it's embedded in the wiki.

Michael Depledge: Are you thinking about horizon scanning, and how the populations will change over time, and how they are affected by things such as fracking?

Answer: Energy use in each city is an individual thing, and changing almost every day. We also know there are strategies/policies that change weekly and we have to draw a line and go with assumptions that we make now. In this project we are not looking at the fine energy modelling, but annual average changes, and country trend scenarios.

Clive Sabel: I'm unsure how the urban balance tool will be integrated with the other methodological work packages, and do not totally understand what you are aiming at now with this work package.

Niko Karvosenoja: We would like to discuss how parts of this could be integrated with our dissemination tool.

Clive Sabel: The focus at this stage of the project should not be on tool development, but on getting the results out to cities as we are in the final year of the project.

Jouni Tuomisto: We heard about draft assessments from different cities, and we will do this energy assessment for those 4 cities in a comparable way. In this phase we would like to see more sharing of assessments done so we can look at methods.

Clive Sabel: I know some cities are sharing more than others – for example I hear Thessaloniki is not sharing well. I've been in projects where the tools aren't used, and the strength of this project is to get real assessments done.

Laura Perez: I don't understand, as we already have the tool there in the wiki.

Sanda Torras: We are asking whether we need to make our tool more user friendly, and is it needed, wanted and relevant? We need to know this so we can finalise our deliverable.

Presentation: WP3 GIS City – Zena Wood

Clive Sabel: Have the advisory board members worked with a dissemination tool like this before to help policy makers?

Michael Depledge: Yes, I used to feed science to policy makers and found they are not interested as they had their own questions, so it's important to engage them and find out what they need to implement their policies. My Centre has a programme on information graphics, as some policy makers have a background in the Arts etc., and find information graphics easier to understand. 'Dissemination tool' sounds like throwing seeds onto a field; we really need an 'engagement tool'.

Neil Morisetti: Most policy makers don't understand why it's important unless something catastrophic has happened. They want to know what the problem is, what the solutions are, and their timeframe/cost. It is fundamental to get across the message in a way that suits the audience, to someone who doesn't have time to look into the background, and you must set the context.

Marco Martuzzi: I struggle with the idea of a dissemination tool, and think it's more a question of a dissemination strategy. You mentioned collecting further information from cities, but I think this needs to be from the project. I look forward to seeing examples.

Zena Wood: The questionnaire will include mock-ups of what the tool could be.

Clive Sabel: So this is seen as a tool that helps methodological work packages and cities communicate findings from the project, and helps create a dialogue around the implications of those findings, so this is for all to get involved with and have a view on.

Laura Perez: Who will have this questionnaire? Administration is burdensome in Urgenche and cities do little, as we do it on their behalf, so it's no use if we are interpreting for them as we are biased – it may be better to have meetings with them.

Clive Sabel: This is meant to be bottom up.

Rosemary Hiscock: It is important to show policy makers the strength of evidence behind what we are doing, as the evidence base for well-being is not really there.

Michael Depledge: Public engagement is important, and a good way to get the attention of policy makers. We haven't got to the stage where I know what your simple story is.

Neil Morisetti: It's not the whole public you are after, but the 20% that will put pressure on the policy makers.

Presentation: WP4 Building Stock - Marjo Niittynen

Clive Sabel: The floor areas of buildings shown are total, not average, and are therefore not comparable between cities – it would be better to give percentages.

Nino Kunzli: It would be useful to show some of this data on a per capita basis for each city.

Jouni Tuomisto: Just to clarify, where we've said IEQ data is available for a city, this is national data not city data.

Simon Kingham: Is the main scenario people insulating their homes?

Answer: From the housing point of view, some cities are looking at these kind of scenarios for indoor environments but others are not.

Simon Kingham: Presumably it does not matter of some cities such as Xi'an do not have data if they have no policies or scenarios relating to it.

Michael Depledge: Any ideas on how building stock will change by 2020?

Answer: We have some data on renovation rates and new buildings for Kuopio for example.

Stephan Trueb: You mentioned a renovation rate of 3%. This seems really high as in Europe it's normally 1-2%. Do you have policies relating to this to make it so high in Kuopio?

Answer: Our data is from a consultancy company that estimated this rate.

Laura Perez: Our energy person in Basel is concerned about looking at indoor air quality, as differences in Basel would be so small that they would be irrelevant. They want to look at energy consumption, so do not want to engage further with looking at indoor air quality.

Nino Kunzli: We should not assume increased insulation would always lead to more mould. We need to be aware of how it is done as this varies.

Xiaochuan Pan: I'm interested in the association between housing factors and well-being. A paper showed that people in North China, where it is colder, have a 5 year shorter life expectancy, so this is relevant.

Clive Sabel: Is there evidence that this is to do with indoor air quality from heating or is this speculation?

Presentation: WP5 Urban Traffic - Menno Keuken

Laura Perez: I see for the health outcomes you've used all-cause mortality – wouldn't it be better to go for cardio-vascular mortality as this is more important for EC?

Answer: That's fine, let me know what you want included and we can make the calculations.

Marco Martuzzi: This presentation shows the degree of overlap and collaboration in this project. We need to discuss how to package what we have gathered e.g. what end points to use. We have a complete list of these outcomes – how prescriptive do we want to be? There are several problems with how we package this information. We cannot use concentrations derived from clever modelling to estimate mortality for example. We need to decide on our audience and potential use.

Nino Kunzli: What are we doing with European results in dealing with the bottom line, as it is very risky to come out with wrong messages? Perhaps for one indicator used in several settings e.g. EC, we add a new reference scenario using none of these policies, but for comparison the bottom line of these levels we should go for e.g. 1 in 10,000 lung cancer cases for this exposure. This is an accepted value, so EC in cities should not be more than 0.1 $\mu g/m^3$ for annual mean.
The target should be much lower on the soot side and use it as a reference to see additional benefits. Many countries have a policy for such pollutants but it's not enforced. I think with decisions like Euro 5 & Euro 6 it will very much go in that direction and soot will go down.

Clive Sabel: Part of our role is to suggest proposals that could make a big difference.

Michael Depledge: When talking about reducing traffic by 10%, how does it correlate with the noise issue?

Answer: In cities the urban motorways are dominant for both emissions and noise, and cities have no control over the motorways.

Nino Kunzli: Construction is an issue too.

Rainer Friedrich: The problem with noise and transport is a reduction by 50% gives on a 3 dB difference.

Matti Jantunen: If you reduce car traffic, what do you increase instead? If you increase buses & trams, these are very noisy and cause vibrations.

Rainer Friedrich: In the long run you can heavily reduce the noise by certain design features.

Day 3 – Saturday 17th August

Project Advisory Board Feedback
The following is the report sent through by Professor Michael Depledge:-

Members:

Professor Michael Depledge (University of Exeter, UK) (Chair).
Rear Admiral Neil Morisetti, (Foreign Secretary's Special Representative for Climate Change, UK Government).
Professor Simon Kingham (University of Canterbury, New Zealand)

Introduction

The Advisory Board recognised the enormous amount of work and effort that URGENCHE participants have devoted to the project so far, and the positive interactions among the different research teams. We were grateful for the open discussions and helpful discussions we had with the attendees at the Basel meeting. The Advisory Board offered constructive criticism and suggestions in the spirit of ensuring that the URGENCHE project gains the recognition it deserves and influences future climate and health policies within the EU.

Comments:

- It is important to recognise the changing nature of DG-Research as it proceeds to allocate resources to the European Research Council and the Framework Programmes. The latter are more orientated to addressing real world problems within the EU and beyond. URGENCHE, being funded by FP7, will be judged on the quality of the science and the relevance of its outputs to policymakers.
- Although at the initial start-up meeting the aims and objectives of URGENCHE were clearly defined, the Advisory Board feel that it is important to reiterate them frequently and to modify them as the need arises.
- The URGENCHE story must be clear to outside observers. What is being done? Why? What has been found out? What still needs to be addressed? What are the implications for policymakers? This information must be understood by all participants to ensure that the project remains integrated and coherent. It is important that participants not only work on their particular work packages, but that they also understand and are involved in the project as a whole.
- The context in which research is being conducted should be highlighted. For example, it would be helpful to be able to tell at a glance the size of each of the participating cities and the demographics of their populations, as well as key characteristics of their stock of buildings, their traffic system and their energy system.
- It would also be helpful to present a clear idea of what would be expected (perhaps based on projections from current data) by the year 2020, in terms of population, changes in the building stock, traffic levels and energy requirements and sources.

- The term "business as usual" was often used to describe what particular cities had planned to do in the future. The Advisory Board found this expression confusing. Normally, "business as usual" conveys the sense that no action is being taken and that whatever is done today will continue to be done tomorrow. Implementing a new plan so that things change over time, is not, in our view "business as usual".
- With regard to the science discussed, it would be helpful to have standard forms of data collection across the cities and to highlight where this was not possible. It would be helpful to identify factors that will not be addressed in detail by URGENCHE, but that might be influenced by climate policies and that could affect health and wellbeing. For example, ground level ozone, the use of nanomaterials such as cerium oxide, as fuel additives in public transport.
- Although greenhouse gas emission policies can influence health and wellbeing by changing levels of air pollution, the role of green and blue spaces in cities perhaps deserves more attention. Effects on outdoor activity levels and transport choices, promotion of walking and cycling, reduction in heat island effects, influences on urban biodiversity, etc., all potentially affect health and wellbeing and reduce the adverse effects of climate change.
- Some of the data presented during the course of the Basel meeting were presented in inappropriate statistical forms. For example, means and standard deviations were shown for data that was clearly not normally distributed (and should therefore be presented in other ways (medians and ranges)). It is obviously important to check all statistical analyses for their appropriateness.
- With regard to policy, in explaining the URGENCHE project it is important to be clear about what is meant by a "greenhouse gas emissions reduction policy". At present, the focus seems to be on policies related to buildings (e.g. thermal insulation), traffic (e.g. less private cars, more public transport) and energy (e.g. less fossil fuels, more renewable energy). However, there are many other policy areas that can be used to reduce GHG emissions and which can lead to improved health and wellbeing. Sustainable health care systems and changes in agricultural practice provide two examples. Whilst these may be outside the scope of URGENCHE, it is important to acknowledge their existence.
- Many policies that can result in reduced greenhouse gas emissions can provide other additional benefits. These so-called "co-benefits" are important to highlight to policymakers.
- During the remainder of the project the aim must be to ensure that URGENCHE achieves the recognition that it deserves and is used to inform policy decisions. We suggest that in the remaining months a "glide path" is developed to ensure a managed process by which URGENCHE leaders engage in an interactive dialogue with relevant policymakers to maximise the impact of URGENCHE findings.
- There is a pressing need for evidence to support a narrative/story that makes the case for action to address the risks posed by a changing climate.
- As well as highlighting the negative impacts of climate change on health and wellbeing, it would be helpful to identify evidence of benefits of action or to highlight the risks of inaction.
- The need for new policies is perhaps greater now than when Project URGENCHE work started as the context has changed.

- Specific needs will vary from country to country and with different audiences, but for the vast majority of policymakers, the dominant issue is an economic one, often to the exclusion of all others. This needs to be recognised when interacting with policymakers.
- URGENCHE must recognise that many policymakers believe that until they have addressed economic threats, they cannot afford to worry about other things, including climate change.
- The focus is very much a short term one that is influenced by political cycles.
- There is a growing pressure on resources, including in Brussels where DGs will want to see how work can inform policy decisions and future resource funding will be dependent on being able to demonstrate such utility.
- Addressing these issues is complex and we tend to shy away from complex problems, focussing instead on each topic, one at a time. Yet the reality of 21st century is that economic, environment and health issues are intimately interconnected and require institutions/individuals to adapt to deal with them.
- URGENCHE needs to present work in the form of compelling case for action.
- The audience will vary and one size does not fit all, either within or between countries. URGENCHE cities will know your own best.
- The Advisory Group suggest focussing on municipal/city and individuals. Much of case for action in addressing climate change will come from bottom up, especially the influence of cities.
- URGENCHE needs to recognise that the audience is likely to have other priorities and needs to be convinced of the requirement to act on this issue instead of something else.
- Policymakers are likely to have limited time and may not have a scientific background. Therefore, there is a need to find a way of presenting findings that does not dilute science but shows why it is relevant to them. This may require for example, innovative info-graphics, making short films, use of social media, engagement of leaders in society, etc.
- Making the case might be about presenting best practice amongst the seven cities but may also be about demonstrating what can be achieved by cities of similar size/mix to one of the seven.
- It was evident that whatever practices might be undertaken in some of the European cities might not be feasible is some of the other European cities or in China, in part due to the physical environment but also due to different social and political circumstances. It is important to bring this out as a finding of URGENCHE.
- As well as highlighting benefits, URGENCHE should aim to provide an indication of timescale, especially if it can demonstrate early benefits of action (electoral cycle), and whilst it may not be able to provide economic cost/benefit perhaps, it is possible to do so in terms such as "beds saved in hospital" etc.
- URGENCHE should clearly indicate how effectiveness of action might be measured.
- It is vitally important to indicate the degree of confidence of the results (recognising that they rarely have 100% certainty) and risks (both positive and negative).
- The Advisory Group strongly recommend devoting time and resources to developing and implementing dissemination and engagement strategies, between now and the cessation of URGENCHE.

In conclusion, it is worth mentioning that the Advisory Board are acutely aware that many of the points made above have already been considered by members of URGENCHE. However, it was apparent to us that for those observing URGENCHE from the outside, it would not be a simple task to discern either the structure or the significance findings of URGENCHE, hence our emphasis on communication.

Project Management Team Meeting

The notes and actions from this meeting will be circulated separately to the relevant people.

Summary of actions:

Action	Responsible
University of Nanjing to discuss use of weighted exposures with WHO.	Haikun Wang/Miaomiao Liu
University of Stuttgart to collaborate with Xi'an contacts regarding the metro	Ganlin Huang
Zena to circulate questionnaires regarding the dissemination tool	Zena Wood