14th European Forum on Eco-innovation

Into clean air...

Delivering innovative solutions for mobility, energy and ICT in cities

Thursday 23 and Friday 24 May 2013
Hotel Ambassador-Zlatá Husa
Prague, Czech Republic
Dear participants,

Clean air is essential to our health and our environment.

The air we breathe today is much cleaner than in previous decades. We have seen an absolute decoupling between economic growth and emissions. And we have almost eradicated the «acid rain» problem which was so prominent in the 70s and 80s.

A lot more has to be done: Air pollution remains the number-one environment-related health risk in Europe, resulting in nearly half a million premature deaths every year in the European Union; ten times more than from road accidents. With 68 % of EU citizens living in urban areas, the issue of air quality is a direct concern for many of us.

In EU environment policy we have declared 2013 The Year of Air to spark the attention of local, national and European authorities and to stimulate more efficient efforts towards improved air quality. We have launched a comprehensive review of EU air policy and turned to innovation as a key mechanism to address the challenges we face.

Smart innovative solutions for cleaner air already exist. It is their widespread adoption through good practices or regulatory standards that needs to be encouraged. That is why the Commission launched a European Innovation Partnership (EIP) for Smart Cities and Communities in July 2012.

The Smart Cities and Communities EIP aims to catalyse progress in areas where energy production, distribution and use; mobility and transport; and information and communication technologies (ICT) are closely linked. It will offer new interdisciplinary opportunities to improve services while reducing energy and resource consumption as well as greenhouse gases and other polluting emissions.

I hope that you will take the topic to heart as much as I do and that you will find it fascinating to engage in discussions and share valuable insights enabling identification of the best practical solutions to improve the air we breathe and the quality of environment we live in.
Ladies and Gentlemen,

The main topic of this forum is innovations to help improve the quality of air in our cities. Air quality depends on numerous factors including transport, industrial production, heating, and in border regions pollution from neighbouring countries. Air-quality issues have been the subject of much debate in recent years, and I am pleased that this year’s European Forum on Eco-Innovation, held in the Czech Republic, will focus on issues of air-quality.

Problems with air quality and air pollution are something we face on a daily basis. Cities face issues with emissions limits. As a result, industrial plants in some countries are subject to lower emission limits than comparable facilities in others. To offset this unbalance, for example, the Ministry of Environment has put pressure on neighbouring countries to approve emission limits for facilities with cross-border impact.

Since 2011, when I joined the Ministry of the Environment, various steps have been taken to improve the air-quality, particularly in the Moravian-Silesian Region where air pollution is a major problem for the Czech Republic. Measures to improve air quality include convalescence programs for children, boiler subsidies, and assistance through EU funds.

This assistance covers 90% of the cost of projects proposed by the largest polluters in the region. Czech Republic is the first EU Member State to negotiate this.

Having allocated 100 million Crowns to boiler subsidies, the Ministry of Environment will extend this programme to other regions. So far, interest has been expressed by the Ústí, Central Bohemia, and South Moravian Regions. These territories will have to meet certain terms, where the Ministry’s contribution for the replacement of old boilers with higher efficiency alternatives must be matched by regional subsidies.

I hope this forum will provide you with inspiration to improve air quality.
Day 1
Thursday 23rd of May

09:00 - 09:30
Registration and coffee

Session 1: Framing the air quality challenge
This session will introduce participants to the latest evidence on urban air quality including trends, impacts and pollution sources and why the issue has high political priority.

09:30 - 09:50
Welcome message: 2013 European Year of Air
1. Tomáš Chalupa1, Minister, Ministry of Environment of the Czech Republic
2. Martin Kubal, Minister, Ministry of Industry and Trade of the Czech Republic
3. Timo Makela3, Director, European Commission, Directorate-General Environment, International affairs, LIFE & Eco-innovation Unit

09:50 - 10:05
What is the air quality challenge in Europe?
Evidence, causes, impacts and trends in air pollution in European cities
Vincent-Henri Peuch4, Head of Atmospheric Composition Division, MACC-II Project Co-ordinator, European Centre for Medium-Range Weather Forecasts (ECMWF)

10:05 - 10:20
Current frameworks for action
Introduction to the European Innovation Partnership ‘Smart Cities and Communities’: it aims introduce smart cities solutions at the intersection of energy, transport and ICT, and at facilitating the creation of partnerships between local decision makers, industry suppliers, and community organisations to create greater quality of life in cities and reducing greenhouse gas emissions.
Henriette Van-Eijl5, Policy officer, European Commission, Directorate-General for Mobility and Transport, Research and Innovative Transport Systems Unit

10:20 - 10:35
Perspective of the cities:
Cities as an engine for transformation
Mark Hidson6, Deputy Regional Director, ICLEI- Local Governments for Sustainability/Director, ICLEI’s Global Sustainable Procurement Centre

10:35 - 10:55
Speakers Q & A and plenary discussion

10:55 - 11:00
Getting the most from the Forum experience

11:00 - 11:30
Coffee break

Session 2: Meeting the air quality challenge through urban strategic planning
Improving air quality is one of a cluster of development issues in cities. This session looks at how it can best be addressed within the context of effective strategic planning.

11:30 - 12:00
Getting to grips with the challenge.
Overview of emerging strategic planning
(uurban mobility plan from the strategy to the implementation)
Simon Goddard7, Project Manager, Architect, Gehl Architects

Example of city that have done strategic planning:
Nantes
Case study from a city that has drawn up and delivered an air quality strategic plan.
Jean-François Retière8, Vice President of Nantes Métropole in charge of Commuting and Transportation, Nantes Métropole

12:00 - 12:45
Table experience share (some tables will work on mobility, others on energy, and others on ICT solutions).
People share their own experiences of strategic planning. Highlight key learning insights. Plenary feedback.

12:45 - 13:00
Case studies spotlight

13:00 - 14:00
Lunch
Post-it passport
(Delegates choose 3 from 18 available case studies which leaves time to table rapporteurs to discuss their conclusions)

Session 3: Changing mindsets and behaviours
The session will present 18 case studies featuring innovative programmes from the European, national and city levels, with a special emphasis on encouraging citizens’ behaviours that lead to cleaner air outcomes.

14:00 - 15:50
Roundtables with case studies on changing the mindsets and behaviours of politicians, businesses, organisations and individuals related to the main topics of the Forum: energy, mobility and ICT
Each of the 18 case studies will be presented three times (3 x 30 minutes).
Each time with a different audience.
The groups will also propose recommendations.
1. Ticket Kyoto: Mobilizing to reduce CO₂ emissions in public transport, Jean-Luc de Wilde d’Estmael©, Head of Strategic Planning and European Projects, STIB (Urban Public Transport in Brussels)

2. Enabling Everyday Mobility and dynamic decision support for commuters and travellers alike, David Volpe©, Senior Product Manager, HERE Transit, Nokia

3. A breeze of fresh air in European Cities (Clean Air project), Heiko Balsmeyer©, Project Coordinator LIFE+ Clean Air, Verkehrsclub Deutschland e.V. (VCD)

4. Electric Vehicles in Czech Republic, Jaromir Marusinec©, Chairman, Czech electric cars Industry Association (ASEP)

5. Supporting sustainable development of Prague region through advanced modelling tools for air quality, Vladislav Bízek©, Senior Consultant, Environment Center, Charles University and Jan Merti©, Twinning project leader from the beneficiary side, Czech Environmental Information Agency (CENA)

6. Delivering a Sustainable Urban Mobility Plan in Aberdeen, the Oil Capital of Europe, Louise Napier©, Senior Planner, Aberdeen City Council

7. Reduction of CO₂ and black carbon emissions and black carbon concentration by adaptive traffic management-project CARBOTRAF, Martin Litzenberger©, Senior Engineer, Department Safety & Security Business Unit New Sensor Technologies, AIT Austrian Institute of Technology GmbH

8. Road pricing measures for urban mobility: Milano Area C experience, Pierfrancesco Maran©, Milan Councillor for Environment and Transport, Comune di Milano

9. New methods for quantifying emission sources in relation to transport, Jiří Huzlík©, Head of the Research department of Transport and Environment, Transport Research Centre (CDV)-Ministry of Transport of the Czech Republic

10. The trust between citizens and the authorities enhanced through information sharing and mobility dialogue (Zagreb), Thana Damjanovic©, Project Associate, ODRAZ-Sustainable Mobility and Environment

11. Restart of CNG (Compressed Natural Gas) in Europe, Václav Král©, Director, MOTOR JiKO

12. How to enhance the mobility management innovation process in CEEC, Martin Hajek©, Center Director, RODOS Center for the Development of Transportation Systems

13. City-VITALity-Sustainability – Soft policy approaches towards achieving international targets, Jerome Simpson©, Senior Expert (Green Transport), Environmental Policy Directorate, Regional Environmental Center

14. beAqued – the electrical bicycle of Agueda for free usage, Célia Laranjeira©, Coordinator of Local Sustainable Development Programs and Environmental Management, Câmara Municipal de Agueda

15. Cooperatively planning your city: a model of the governance process, Paolo Pissarello©, Vice-President, Genova Smart City association (Vice-Mayor)

16. Almada’s approach to smarter and eco-efficient mobility, Catarina Freitas©, Head of Department, Sustainable Environmental Management and Planning Department, City Council of Almada

17. Good practice – from theoretical to practice (Cluster Cooperation Green Technology), Jan Rakulán©, Chairman of the board, Centre for Research and Innovation (CVII)

18. “Mobility challenge”: an incentive for alternative modes of transport, Jean-François Retière, Vice President of Nantes Métropole in charge of Commuting and Transportation, Nantes Métropole

15:50 - 16:20
Coffee break

Session 4: Informing clean air recommendations
We employ creative process innovation at the Forum both to highlight innovative ideas and harness our ‘collective brain’ to solve real issues facing cities.

16:20 - 17:00
Clean Air Innovation (Pecha Kucha process)
Four experts (faced with issues mentioned above) each share their views in a dynamic format.
20 slides x only 20 seconds, starting from…..!

17:00 - 18:00
Grappling with real issues
Participants bring their experience and creativity to address issues in Czech cities. Jaroslav Klusák©, Energy manager of the town, Department of Projects and Strategies, City of Litoměřice
Jiří Kohout©, Transport project manager, Plzen City
Iva Machalová©, Transport Specialist, Brno City Municipality

18:00
Delegates move to reception with organised buses

18:30 - 20:00
Cocktail reception at the National Technical Museum
(Kostelní 42, 170 78 Prague 7, Czech Republic)
Speech of Karel Ksandr, Managing director of the National Technical Museum and Martin Frélich, First deputy of the Ministry of Environment of the Czech Republic.
Day 2
Friday 24th of May

08:30 - 09:00
Arrival and coffee

Session 5: Financing actions in tough economic times
All infrastructure developments in cities are very expensive. This session will highlight innovation in financing solutions, illustrated with city case studies.

09:00 - 10:35
Short introduction to the cases studies
Robert Stussi, Mobility Consultant, CIVITAS

3 case studies of innovation in financing
1. Public Private Partnerships that work
Jan-Olaf Willums, Chairman and founder, InSpire Invest
2. Procurement programmes (public or private)
Heather Allen, Programme Director Sustainable Transport, TRL
3. Citizen scheme Tallinn awarded free public transport passes to its citizens following a city referendum,
   Allan Alaküla, Head of Tallinn EU Office, City of Tallinn

Table groups experience share (with possible lead per table)

10:35 - 11:05
Coffee break

Session 6: Making connections for the right solutions for Smart Cities
This session highlights the way cities are developing innovative partnerships and networks and effectively engaging with citizens to create a better quality of urban living.

11:05 - 11:55
Short introduction to the cases studies

3 presentations on experience/actions to make effective connections
1. CIVITAS
   Paolo Gandolfi, Deputy Mayor, Municipality of Reggio Emilia
2. Litoměřice (CZ)
   Antonín Tym, Geothermal project manager, City of Litoměřice
3. Business connecting well with city
   Ger Baron, Project Manager ICT, Amsterdam Innovation Motor

11:55 - 12:45
Drawing the strands together
A final panel discussion to further explore how we can overcome some of the entrenched barriers to achieving cleaner air in our cities.

The panel will discuss the emerging messages and recommendations as well as the steps that need to be taken.

Panellists:
1. Mobility perspective: Célia Laranjeira, Coordinator of Local Sustainable Development Programs and Environmental Management, Câmara Municipal de Águeda
2. Energy perspective: Antonio Gomes Martins, Coordinator of the Energy for Sustainability Initiative, University of Coimbra
3. ICT perspective: Giorgio Ambrosino, Director, GA Consultancy
4. Citizen perspective: Paolo Pissarello, Vice-President, AGSC
5. Timo Makela, Director, European Commission, Directorate-General Environment, International affairs, LIFE & Eco-innovation Unit

12:45 – 13:00
Main Forum closing remarks:
Timo Makela, Director, European Commission, Directorate-General Environment, International affairs, LIFE & Eco-innovation Unit
Rut Bízková, Chairperson (Former minister of Environment), Technology Agency of the Czech Republic

13:00 – 14:00
Closing and Lunch

Participants can choose to go on the site visit to Škoda or do the Prague walking tour.

14:00 – 16:00
Prague walking tour incorporating points within the city’s famous old town (participants will leave from the Hotel Ambassador–Zlatá Husa).
The walking tour is limited to 50 participants.
Participants can expect to be back in Prague at 18:00.

14:00 (sharp)
Departure of the buses for the Škoda site visit.
(Škoda Auto a.s., Václava Klementa 869, 293 60 Mladá Boleslav, Czech Republic).
The site visit is limited to 50 participants.
Participants can expect to be back in Prague at 18:00.
(drop-off at the Hotel Ambassador–Zlatá Husa).
Who’s who?

1. Tomáš Chalupa
2. Martin Kuba
3. Timo Makela
4. Vincent-Henri Peuch
5. Henriette Van-Eijl
6. Mark Hidson
7. Simon Goddard
8. Jean-François Retière
9. Jean-Luc de Wilde d’Estmael
10. David Volpe
11. Heiko Balsmeyer
12. Jaromír Marusinec
13. Vladislav Bízek
14. Jan Mertlík
15. Louise Napier
16. Martin Litzenberger
17. Pierfrancesco Maran
18. Jiří Huzlík
19. Tíhna Danjanovic
20. Václav Král
21. Martin Hajek
22. Jerome Simpson
23. Célia Laranjeira
24. Paolo Pissarello
25. Catarina Freitas
26. Jan Rakušan
27. Jaroslav Klusák
28. Jiří Kohout
29. Iva Machalová
30. Robert Stussi
31. Jan-Olaf Willums
32. Heather Allen
33. Allan Alaküla
34. Paolo Gandolfi
35. Antonin Tym
36. Ger Baron
37. Antonio Gomes Martins
38. Giorgio Ambrosino
39. Rut Bízková
Session 3:  
Changing mindsets and behaviour  

case studies, projects and initiatives

1. Ticket Kyoto: Mobilizing to reduce CO₂ emissions in public transport
2. Enabling Everyday Mobility and dynamic decision support for commuters and travellers alike
3. A breeze of fresh air in European Cities (Clean Air project)
4. Electric Vehicles in Czech Republic
5. Supporting sustainable development of Prague region through advanced modelling tools for air quality
6. Delivering a Sustainable Urban Mobility Plan in Aberdeen, the Oil Capital of Europe
7. Reduction of CO₂ and black carbon emissions and black carbon concentration by adaptive traffic management-project CARBOTRAF
8. Road pricing measures for urban mobility. Milano Area C experience
9. New methods for quantifying emission sources in relation to transport
10. The trust between citizens and the authorities enhanced through information sharing and mobility dialogue (Zagreb)
11. Restart of CNG (Compressed Natural Gas) in Europe
12. How to enhance mobility management innovation process in CEEC
13. City-VITALity-Sustainability – Soft policy approaches towards achieving international targets
14. beAgueda – the electrical bicycle of Agueda for free usage
15. Cooperatively planning your city: a model of the governance process
16. Almada’s approach to a smarter and eco-efficient mobility
17. Good practice – from theoretical to practice (Cluster Cooperation Green Technology)
18. “Mobility challenge”: an incentive for alternative modes of transpor
Ticket Kyoto: Mobilizing to reduce CO$_2$ emissions in public transport

Brief/General description:
In March 2010, five highly motivated public transport companies - moBi (Bielefeld), RATP (Paris), RET (Rotterdam), STIB (Brussels) and TFGM (Manchester) - joined forces in Ticket to Kyoto, a 4-year Interreg IVB NWE project with a budget of around EUR 12 million (50% from EU and 50% from local partners).

The project goal was to implement the principle of low CO$_2$ emissions as a new standard for urban public transport. In order to achieve CO$_2$ reduction, the partners decided to work in 5 different complementary fields (work packages):
1. Quick wins: sharing and implementing best practices with a very short-term ROI;
2. Investments: innovating in energy efficiency, energy production and energy recovery from braking;
3. CO$_2$ 2020 strategy: building a common carbon balance tool, choosing common CO$_2$ indicators and engaging in a concrete CO$_2$ strategy by 2020;
4. Context: analysing the legal and institutional context of each partner and identifying contextual CO$_2$ leverage effects;
5. Communication: mobilizing internal resources, sharing experiences with stakeholders and mobilizing clients.

The resources include a mix of company staff, external experts and special device providers selected by tendering. An important barrier met during the project was that the priorities changed: climate change and energy consumption problems were very high on the agenda in 2008-2010, but much lower after the financial crisis. It meant an increased difficulty in financing investments and involving sufficient human resources in long term projects and research. The partners partially solved these problems thanks to the EU fixed contribution. Nevertheless, the feedback was good and the partners still hope to identify some good practices thanks to the project. The project will be successful when investments and other actions achieved are measured as having a significant impact on energy consumption and CO$_2$ reduction. Consequently these actions will be replicated in larger ambitious CO$_2$ strategies dedicated to improving the carbon balance of the concerned companies by 2020.

Outcomes (environmental, social, economic impacts):
Ticket to Kyoto has strong sustainable dimensions:
- **social:** in achieving quick energy wins, related to behaviours and people commitment.
- **economic:** the chosen investments bring a high return on investment.
- **environmental:** the aim is to improve PT carbon balance and to reduce energy consumption.

It is innovative by the scale of implementation (large companies), the investments, peer reviews and the tendering procedures for new products (i.e: energy recovery from braking).

Meanwhile, 20 quick wins and more than 10 investments are in operation and reducing energy consumption. All the studies will be published to facilitate replication. Feedback is positive and will lead to wider deployment of some experimented techniques or processes.

In this case, cooperation means global picture, mobilisation, innovation, realisation and publication. Every sector has to look for reductions in energy and carbon emissions. Ticket to Kyoto shows that it is possible to find a way with clear ambitions under difficult circumstances. Working together with peers has a strong effect on the consistency of action and motivation of people to achieve their goals.
Case studies - session 3
Changing mindsets and behaviours

Enabling Everyday Mobility and dynamic decision support for commuters and traveller’s alike

**Speaker**
Mr David Volpe

**Session 3 - 2**
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**Outcomes** (environmental, social, economic impacts):
By bringing together all modes of transportation into a single tool, users will be easily able to access all of their transport options. Community feedback will help optimise these local, regional, and global transportation networks. With an ever growing user base, HERE Transit consumers in New York or Beijing are experiencing the same data availability. This is expected to enhance user’s day-to-day commute and lessen the demand for driving in congested cities and sprawling suburbs.

**Brief/General description:**
HERE Transit is part of a growing suite of tools that enables consumers to understand their Everyday Mobility choices. It is a trusted advisor showing transportation schedules, it will build a platform to support real-time decisions. The vision for the future is to provide users with information on travel time and cost and ultimately their carbon footprint, enabling them to make the best transport choices. By integrating a global dataset the solutions provided could form the basis of broader transport planning. All cities and regions can become partners and contribute to this product. By having a more flexible framework than our competition, we are looking to offset or even eliminate further investment in data management at local level. For citizens, this means a ubiquitous cross-platform solution that becomes that trusted advisor for their Everyday Mobility.

A breeze of fresh air in European Cities

**Speaker**
Mr Heiko Balsmeyer

**Session 3 - 3**
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**Outcomes** (environmental, social, economic impacts):
The ecological impact of best practice models is the reduction of emissions e.g. by improving the fleet in Budapest. Every bus will be equipped with a particle filter that reduces the diesel soot emissions. The project will result in better health in cities and reduced emissions of air pollutants. Co-benefits include retaining jobs in the SMEs that produce particle-filters or SCR-systems.

**Brief/General description:**
The Clean Air project delivers best practice examples of air quality projects relating to the transport sector in cities. Nine NGOs from six EU-Member States (Austria, Belgium, Denmark, Germany, Slovak Republic and Hungary) are cooperating in the LIFE+ project. The project is part financed by the EU-Commission and part financed by project partners.
In Germany, Heiko Balsmeyer coordinates the “sootfree for the climate” campaign. The first challenge was to develop actions for the campaign that could successfully support our partners in Hungary and the Slovak Republic. The project received support from the German ministry of the environment to build a website on Clean Air (www.cleanair-europe.org).
VCD use the internet and social media to raise awareness and influence politicians, administrations and the public. At a conference earlier this year in Brussels VCD learned that the NGO-community will play an important role in the success of the year of air. We will measure our success by implemented best-practice. The model cases will reduce transport emissions.
Electric Vehicles in Czech Republic

Speaker
Mr Jaromir Marusinec

Session 3 - 4

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Ongoing project

Stakeholders involved:
Ministry of Environment, Electric Vehicles in Czech Republic, Brno University of Technology, Designers and Users, Czech office for standards, metrology and testing, SME companies

For more information on the project, please visit the following website:
www.asep.cz

Brief/General description:
ASEP is a project consortium to promote electromobility. ASEP implements the NGO part of electromobility development strategy in the Czech Republic. Electromobility in the Czech Republic is a priority, but still in a slow growth phase. Infrastructure is being prepared, manufacturing processes and specific models are being developed. Technologies have been developing for several years, but the small quantity of production keeps prices high.

How do the participating partners work together? ASEP jointly organise exhibitions, participate in conferences, and organise promotion tours and races. The main communication activity is discussion on international and European standards for electromobility. ASEP resources include membership fees, sponsors, marketing and consulting services. The main source of business is enthusiastic members to promote electromobility.

In the Czech Republic there are various barriers to the expansion of electromobility, such as legislative ambiguities (still missing state support), low prices for new conventional vehicles than in neighbouring countries, non-use of low emission zones in cities, not providing exciting benefits for users of electric vehicles. Still, there are projects and electromobility concepts and different options for financing. For example, building a charging infrastructure and purchase of electric vehicles can be claimed as marketing, which brings companies a better public image.

Supporting sustainable development of Prague region through advanced modelling tools for air quality

Speaker
Mr Vladislav Bízek
Mr Jan Mertl

Session 3 - 5

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Ongoing project

Stakeholders involved:
Representatives of state administration at central and municipal levels, policy makers and representatives of environmental SME tool part in project results validation.

For more information on the project, please visit the following website:
www.sudplan.cz
www.sudplan.cenia.cz
www.geoportal.gov.cz/sudplan

Brief/General description:
The aim of the SUDPLAN project was to develop a web-based planning, prediction and training tool to support decisions in long term urban planning. The tool includes emissions scenario assessment. SUDPLAN is a consortium of partners comprised of 9 organisations. It is led by the Swedish Meteorological and Hydrological Institute (SMHI). The project is funded by the EU 7th Framework Program. The Czech Regional Pilot used the SUDPLAN tool to develop long-term air quality projections and scenarios for the region of Prague. The results of the national pilot are available at the National INSPIRE Geoportal, http://geoportal.gov.cz/sudplan.

Project results were evaluated yearly. A survey conducted found that SUDPLAN was a valuable tool that significantly supported the decision making process for city development and infrastructure. The key strength of SUDPLAN is its potential to support the interdisciplinary urban/regional planning process and contribute to climate change adaptation. The consortium has the unique ability to simulate future development in the areas of climate change, air pollution, and anthropogenic activities. The key weaknesses highlighted were complexity, and limited user friendliness.

The Czech Republic Ministry of the Environment will use the project results to support the development of strategies and policies for climate change adaption.

Outcomes (environmental, social, economic impacts):
The usability of the SUDPLAN results:
- scenario assessment using advanced modelling tools enabling decision makers to predict impacts of climate change, developments in energy and transport sectors and improvements in air quality.
- the project results will help to improve the health, safety and life quality in cities as well as maintain investments in utilities and infrastructures within a changing climate.
- SUDPLAN is unique in the Czech Republic because of its ability to take climate change conditions into account while projecting future levels of secondary pollutants (ground-level ozone, secondary PM).

The project results were published in national scientific journal on air quality in April 2013.
SUDPLAN has the capacity to link environmental simulation models with information and sensor infrastructures including spatial data and climate scenario information. It also provides long term forecasts of environmental factors for urban subsystems such as building and architecture, traffic and transport and spatial planning.
Delivering a Sustainable Urban Mobility Plan in Aberdeen, the Oil Capital of Europe

**Brief/General description:**
The Aberdeen Sustainable Urban Mobility Plan (or SUMP) is essentially a transport masterplan for the City Centre and its six main arterial routes into the City. Aberdeen is currently a focal point for shopping, travel and business; and, the oil based economy allows a level of affluence in the region that makes the private car a feasible first choice to many, increasingly marginalising privatised public transport services and thereby exacerbating traffic issues. Using a project management team consisting of Council officers with particular fields of expertise in transport and the built environment, as well as professors from the Robert Gordon University in Aberdeen, a project and communications plan was prepared. The City Council feels its role in the exercise is to present the views of the populace to the Local Members and then coordinate a viable and realistic strategy. Individuals and businesses were asked to identify what currently works well, what does not work well and what possible solutions could be implemented to improve the city centre alongside a wide range of transport themes including, walking and cycling, private cars, freight, motorcycles, taxis, public transport, ferry and the general environment. In order to achieve this series of public workshops were held along with an online questionnaire and on-street surveys on key pedestrian routes. Citizens and stakeholders were informed of how they could get involved by press releases, posters in libraries and community centres, radio interviews, email forums and new for Aberdeen social media channels: Twitter, Facebook and webpages.

By having stakeholders and citizens identify and acknowledge problems, solutions and opportunities at the beginning of the process this will lead to greater buy-in and realistic outcomes.

**Outcomes (environmental, social, economic impacts):**
As the Aberdeen SUMP is at Preparation Stage this influences the outcomes of the project. Our intended objectives are:

- Improving the safety and security of its users;
- Reducing air and noise pollution, greenhouse gas emissions and energy consumption;
- Improving the efficiency and cost-effectiveness of the transportation of people and goods;
- Enhancing the attractiveness and quality of the urban environment.

Aberdeen's particular focus has been on ensuring this is a grass routes strategy – addressing stakeholders and citizens concerns by asking them to identify the problems and then the associated solutions. For this reason the Aberdeen SUMP has been through an intensive, although not exhaustive, participation, rather than consultation process. The City Council started with a blank sheet and it is anticipated that this approach will lead to genuine public and stakeholder buy-in and empowerment as they see their ideas come forward into a strategy document and then delivered in line with their expectations. The SUMP should also result in benefits to health, air quality, bus movements, safety and the general attractiveness of the City, potentially leading to a more prosperous and city centre.

Reduction of CO₂ and black carbon concentration by adaptive traffic management-project CARBOTRAF

**Brief/General description:**
CARBOTRAF aims to reduce CO₂ and black carbon emissions, as well as black carbon concentrations through adaptive traffic management. Pilot projects are planned in Glasgow and Graz.

The project consists of partners from several sectors. Air quality measurement and traffic telematics equipment is provided by Air Monitors Ltd., European Tech. Serv. NV and EBE Solutions GmbH including air quality measurement devices, network and data. IBM provides the decision support system for traffic management. Imperial College London, VITO and the Austrian Institute of Technology (AIT) work on baseline traffic emission- and air quality modelling that are the major inputs to the decision support system. Limitations encountered during the first half of the project included:

- a lack of communication between traffic and air quality departments in cities;
- limited access to existing traffic data for performing modelling and simulation tasks.

In its starting phase, the project has brought together the air quality and traffic stakeholders of the cities and tried to foster a common understanding of emission and air quality issues. There has been an increased interest in black carbon which can be attributed to the project activities. It is the first success of the project.

As a result of the project traffic/mobility stakeholders and the air quality stakeholders need to establish a closer collaboration. Traffic/mobility has a direct influence on air quality however air quality is not high on the agenda in most city traffic departments. Although air quality data is easily accessible the situation is different with traffic data and that forms the basis for traffic related air quality investigations. The availability of data, collected by publically funded systems (such as traffic management systems), must be greatly improved to allow the open use of this data (keyword “open-data”).

**Outcomes (environmental, social, economic impacts):**
Up to now improvements in traffic flow has been assumed to also reduce emissions and improve air quality. The project results will allow a judgment of whether an “emission focused” traffic management is feasible and can lead to better results than a purely “traffic driven” approach. The project will also raise awareness on black carbon. The project aims for better understanding and cooperation between the air-quality and traffic-management stakeholders.

As this is an on-going project, pilot operations will start in autumn 2013 so there are no results available at the moment.
Road pricing measures for urban mobility. Milano Area C experience

Speaker: Mr Pierfrancesco Maran

Session 3 - 8
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Ongoing project: The Municipal Board has confirmed Area C as a permanent and strategic measure.

Stakeholders involved:
- Local Governments
- Policymaking: City Councils, Autonomous Communities
- Community: Local Authorities
- Associations: Environmental Associations, Unions, Cultural Associations, Consumers Enterprises, Business Association
- Research: Transport Research Centre TriloByte
- Small and Medium Enterprises
- Business: Business Association
- Other: Research Institute and SME

For more information on the project, please visit the following website:
www.comune.milano.it/porteale/wps/portal/comune.milano.it/assorem/assoremove.maran/2010/04/15/milano-area-c-measure

Brief/General description:
Area C is a road pricing measure launched by the Municipality of Milan to improve life in Milan city. Area C is a restricted traffic zone in the centre of Milan. Access to the historical centre of Milan is restricted during weekdays. To enter Area C you must activate an entrance ticket costing 5 euro. The access points are monitored by cameras. The Municipality of Milan self-funded the implementation of the Area C measure.

The measure met with resistance but thanks to dialogue and public consultation the measure was accepted. Discounts for residents, incentives for parking within the zone and several awareness events promoted the measure as a climate change initiative.

A survey carried out by EMG in April 2013 analysed citizens reactions to the Milan initiatives. The survey found that 58% of residents have favourable views of the Area C measure.

Area C has been successful, results include:
- Reduction of daily vehicles entrance - 40.430; Less Traffic - 30.7%;
- Less Road accidents - 25.8%;
- Less occupation of on-street parking -10%;
- Increase of public transport speed +7.4%;
- More cleaner vehicles + 6.1% (from 9.6% to 16.6% of the total vehicles);
- Less pollutant vehicles - 49% (-2.400 pollutant vehicles entering every day the Area C);
- More cleaner vehicles + 6.1% (from 9.6% to 16.6% of the total vehicles);
- Less pollution Total PM10 -18%; Exhaust PM10 - 10%; Ammonia -42%; Nitrogen Oxides -18%; Carbon Dioxide -35%; Less Black Carbon (BC) -40% (May) and – 33% (Oct).

Traffic congestion is a persistent and growing problem in metropolitan regions worldwide. Local governments need innovative solutions to overcome it. Road pricing, in a situation of financial crisis, can be considered an efficient lever to find resources for improving the quality of life of citizens. In Area C, all revenue has been reinvested in projects for sustainable mobility, including strengthening of public transport (10 million euro to improve its frequency) and the development of a bike-sharing system (3 million euro).

New methods for quantifying emission sources in relation to transport

Speaker: Ms Jiří Huzlík

Session 3 - 9
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This ongoing project has not yet been published. After finished it will be published at National Repository of Grey Literature (www.nusl.cz).

Brief/General description:
The main aim of this project is to create and verify a data software tool for quantifying transport emissions. This tool will form part of the QCExpert program package. Included in this is a methodology for selecting measured parameters and interpreting results.

The project has two partners – Transport Research Centre TriloByte Statistical Software, Ltd.

Data on air pollution and data measured by our resources are used for the project solving. The project has majority funding from public resources and has the support of the Technology Agency of the Czech Republic.

Data was lacking on concentration profiles of typical pollutants. Data quality was verified by exploratory data analysis by software QCExpert, commercial product of TriloByte.

The project focuses on developing software tools and identifying air pollution from traffic. The tool will assist in decision making when designing measures to improve air quality.

Outcomes (environmental, social, economic impacts):
TriloByte plans to create one new job and also plans to increase profit for the first 5 years by 1.8 million CZK. The main strength of this approach is the combination of software development with verification of large data sets. Results from the project will be:
- by sales of the software
- by certification of Methodology for quantifying the emission sources in relation to transport by the Ministry of Transportation and / or by the Ministry of the Environment.

Projected sales for the first 5 years amount to CZK 3.6 million. It is scheduled to perform at 16 locations to identify pollution sources for the first 5 years.

Interest was expressed in the road management modelling tool.
Case studies - session 3
Changing minds and behaviours

The trust between citizens and the authorities enhanced through information sharing and mobility dialogue (Zagreb)

Brief/General description:
Citizens’ involvement into the policy process was at the core of Zagreb’s mobility activities within CIVITAS ELAN project. The objectives were manifold: to raise citizens’ interest on and understanding of mobility issues, to encourage them to actively contribute to the improvement of local mobility conditions and to teach them how to best communicate with the authorities to make their voice heard by the City. On the other hand, the project aimed to establish the practice of public dialogue on mobility issues and to convince authorities, other mobility actors, planners and project partners that involving citizens in decision making is a solution that pays well.

Better communication between the City and its citizens and the process of citizen engagement is essential to achieving better solutions and sustainable mobility. The project showed the benefits of continual communication among different stakeholders, the value of consultation when looking for concrete mobility solutions and the necessity for efficient coordination of all mobility actors.

Information sharing and dialogue with citizens revealed citizens’ interest in mobility issues and their readiness to be involved in finding solutions. Presentations and discussions held at different levels, involving different groups of stakeholders, have opened the door to further improvement of public participation.

Outcomes (environmental, social, economic impacts):
Information sharing
The Info-point, a refurbished tram, was transformed into a mobility information centre. A series of presentations «Wednesdays in the tram» and round tables were an excellent opportunity for citizens and journalists to get information. Website, e-newsletters, Facebook, three short films on mobility, leaflets and a toolkit on public consultations were prepared. The results show a very high involvement of citizens:
- 21,630 Info-point visitors and 1,400 participants on more than 30 events;
- 60,000 website and 165,000 Facebook hits; 3,170 viewers of films;
- some 200 media appearances

Comprehensive mobility dialogue
Citizens and experts gathered to discuss mobility issues in their neighbourhoods. They had the opportunity to express their views, share concerns with neighbours and to meet their local committee representatives. The results were presented to the Mayor, the President of the Assembly and City districts. Workshops for nine local committees were organised in order to improve communication between authorities, decision makers, service providers and citizens.
- More than 150 citizens from nine local committees participated in mobility dialogue;
- 143 citizens were trained on communication with City authorities during nine workshops.

Outcomes (environmental, social, economic impacts):
Brief/General description:
Compressed Natural Gas (CNG) has ecological, economic and strategic benefits compared to other fuels.

Europe aims to replace 20% of fossil fuels with renewable energy sources by 2020. Alternative fuels can replace over 5% of motor fuels. If we are really focused on environmental aspects of transportation CNG is a viable opportunity. We should stop tax increase of CNG in EU. Other support could include purchase programs for public procurement, reduced highway tolls and vehicle taxes, scrappage programs, low emission zones and subsidies for new CNG filling stations.

Policy makers should evaluate the environmental potential of fuels. Cooperation with vehicle manufacturers is important including consultation with gas companies and systematic marketing to include education of consumers.

Outcomes (environmental, social, economic impacts):
Natural Gas Vehicles save approximately 50% of fuel costs and reduce emissions (CO₂ - 25%, NOₓ - 90 %, CO - 90 %, Particles - 95 % etc.). This helps to keep our cities clean. Using CNG in transport can improve energy independence. Using biomethane in the transport industry can lead to reductions in emissions, reductions in oil dependency and natural gas and improved fuel self-sufficiency. It could support the European agriculture industry and could be also solution to the storage of electricity. CNG technologies (vehicles, compressors etc.) can quickly contribute to sustainable mobility.
How to enhance the mobility management innovation process in CEE

Brief/General description:
Transport systems development centre (RODOS) is based on the long-term partnership between research and private companies determining the direction of intelligent mobility development in the Czech Republic. RODOS presents a platform that enables views of traffic as an interconnected, communicating and cooperating system.

Participating partners collaborate on a common research agenda that responds to recent research and development, mid-term needs and new opportunities in the fields of data collection and analysis as well as simulation and optimisation of passenger and goods mobility.

New methods of mobility monitoring, modelling, management, control, support and pricing will be developed in the course of research strategy realisation.

The centre connects top experts from the fields of intelligent traffic systems, IT, economy, sociology and social geography, environmental and safety engineering. The total budget of the Centre for the Development of Transportation Systems is CZK 211,800,000. 70% of this funding is provided by the Technology Agency of the Czech Republic, while the remaining 30% comes from the resources of the organisations participating in the project. Private companies contribute a greater share of their own resources than research institutions.

The output and products of the RODOS Centre are diverse. To understand them better, the research program has been broken down into the following three phases:

• Theoretical Research
• Technical Feasibility Study
• Operational Tests and Demonstration Projects, Limited Operation – this phase is crucial and enables us to verify and evaluate our research results under real-world conditions, leading to subsequent steps that will put our findings into everyday use.

Execution of these three phases enables the development and effective testing of new systems, technologies, applications and services. The project proves its merits by continuous implementation of developed technologies and system into the real-world operation and subsequent quantification of direct and indirect benefits resulting from everyday use.

Outcomes (environmental, social, economic impacts):
Telematic systems always have to be adapted to the specific conditions of the locality where they are being implemented. Although based on similar architecture, in-depth knowledge of local conditions is necessary for optimal setting. Therefore a totally unique ‘implementation network’ of the RODOS centre has been created that brings together local companies, public administration and research institutions in the Czech Republic.

Such a network enables us to create the tools to increase the efficiency of the nation-wide transportation system that will be verified in practice through trial operations and then prepared for full deployment, leading to Czech transport system optimisation.

As the end result, users shall realise tangible increases in the quality of their transportation processes after the centre’s outputs are practically implemented. Transport must be traveller-centric and any system (or combination of systems) that ignores this simple fact will have a limited life. It is the socioeconomic outcomes achieved with contribution of the RODOS centre activities that will really count in the long run.

We can see real barriers to development and implementation of innovative mobility management and control methods. These are of a technological nature – permanent lack of quality input data, and of organisational nature – there are no clear plans for implementing ITS at individual levels of public administration, technologies implemented in recent years are closed which hinders development of individual systems, complicates the situation in ITS tenders’ invitation and realisation, resulting in long-time delays of projects, and many more. We are convinced that discussion on these topics will aid in gradual removal of these barriers and subsequent increase in efficiency of the innovation process of mobility management systems implementation.
City-VITAlity-Sustainability – Soft policy approaches towards achieving international targets.

**Speaker**
Mr Jerome Simpson

**Session 3 -13**
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**Ongoing project**

*CIVITAS* is online at:
www.civitas-initiative.eu and details the lessons learned from measure implementation among all Forum member cities. The *CIVITAS* Secretariat is based in Hungary within the REC.

**Stakeholders involved:**
The *CIVITAS* Declaration invites cities to work in partnership with others (e.g. NGOs, transport authorities, public transport operators, transport research institutes, retailers etc.) to develop and implement sustainable urban transport policies, plans and projects. This is in line with the EU’s Directives on Strategic Environmental Assessment (SEA) and public participation.

It also constitutes implementation of the Agenda 21 target: "To develop and apply pollution control and measurement technologies for mobile sources of air pollution and to develop alternative environmentally sound technologies." (chap. 9, para 27).

The European Union’s (EU) principle of subsidiarity (which places the responsibility for action at the national, regional or local level according to Article 5 of the Treaty establishing the European Community) means it does not have its own policy on urban transport. However, achieving sustainable urban mobility is aided by the EU’s Action Plan (2009) and Green Paper (2007) on Urban Mobility. It has also been significantly assisted by EUR 275 million that has co-financed 658 practical and policy-related measures in 58 cities through 13 projects, within its multi-annual Research and Technical Development Programmes.

**Brief/General description:**
Embedded within the European Commission’s Research and Development Programme since 2002, the *CIVITAS* initiative has hosted a growing network of European cities committed to achieving cleaner and better transport. By signing the voluntary non-binding ‘*CIVITAS* Declaration’ over 200 cities in 31 countries are trialing and demonstrating practical and policy-related measures, that contribute to sustainable urban transport. Network members exchange positive and negative experiences through twinning, coaching and staff-exchange mechanisms, an annual conference and *CIVITAS* Award.

The cities’ intent: reduce pollution levels that exceed air quality limits in cities. Urban transport contributes 70% of pollutants and European road transport 40% of all CO₂ emissions. This marks a response to the European Union’s 6th Environmental Action Programme (2002-2012) and its thematic strategies on air and the urban environment (and corresponding legislation).

The European Union’s (EU) principle of subsidiarity (which places the responsibility for action at the national, regional or local level according to Article 5 of the Treaty establishing the European Community) means it does not have its own policy on urban transport. However, achieving sustainable urban mobility is aided by the EU’s Action Plan (2009) and Green Paper (2007) on Urban Mobility. It has also been significantly assisted by EUR 275 million that has co-financed 658 practical and policy-related measures in 58 cities through 13 projects, within its multi-annual Research and Technical Development Programmes.

**Outcomes (environmental, social, economic impacts):**
*CIVITAS* demonstrates a response to a cross-section of policy targets that to date have impacted 68 million European citizens. In Stockholm congestion charges were introduced as part of a transport demand management strategy that helped reduce city traffic by 22% from 2005 to 2006. Clean vehicle strategies increased Stockholm’s share of the car-fleet to 8%. In Bristol, UK, a similar strategy helped reduce freight deliveries for 70 retailers into a single scheme that saved them time and money, while improving citizen safety. Policies to reduce car dependency have been introduced across Europe, for example the bike rental scheme in Krakow, Poland launched in 2009. This resulted in 5000 monthly journeys among 4000 users. In Bremen, Germany a car-sharing scheme was launched. During 2002-2010 the customer base rose 56% to 5,500 users, the target is 20,000 users by 2020. Many other cities have devised strategies to improve use of collective passenger transport services through better quality, promotion, security and land-use planning.

The European *CIVITAS* programme “has had the most influence on urban transport” according to a survey based on interviews conducted from 2009 to 2010. By implementing a combination of policy and practical measures (increasingly framed within a Sustainable Urban Mobility Plan or ‘SUMP’), city administrations improve their urban environment and their citizens’ quality of life and mobility. This in turn reduces the city’s negative impact on climate change, global warming and in part eases the burden on the logistical chain. The Network concept enables potential language barriers to be overcome while sharing experiences with smaller towns and cities. Regional and national level ‘CIVINETs’ have now been launched in Spain/Portugal, the UK and Ireland.
beAgueda – the electrical bicycle of Agueda for free usage

Brief/General description:
Agueda is characterised by its varied terrain, causing severe constraints on mobility between the Historical Centre and the Upper Areas of the city.
The sustainability strategy of the Municipality of Agueda aims to adopt environmentally friendly energy efficient modes of transportation. The municipality issued a challenge to local companies to develop a pilot project for an Electric Bike (e-bike).

In an innovative approach, the e-bike was tested by the population of Agueda, highlighting the following capabilities: ease of travel on steep terrain, travel in comfort and speed, and improved mobility with reduced effort. The feedback from users has allowed the company to improve certain aspects of the e-bike. In parallel, conditions were improved for the movement of bicycles with the construction of 29 km of cycle paths within the city including signalling. A recent survey identified user needs and collected information on user profiles, age, trip motive. The survey also determined the impact of e-bikes on the transport behavior to identify if the e-bike was being used as replacement for car trips, walking or public transport.

Within the campaign promotion and education of cycling were at macro level. At the micro level, the local government consulted with the IMTT (Institute for Mobility and Land Transportation) for a National Plan to Promote Cycling, while at the micro level, projects were developed with schools to promote the use of bicycles including education for road safety. At the University of Aveiro a simulation model for virtual travel map of cycle paths/footpaths was created which included data on local authority works that improved mobility with reduced effort. The feedback of cycle paths within the city including signalling. A recent survey identified user needs and collected information on user profiles, age, trip motive. The survey also determined the impact of e-bikes on the transport behavior to identify if the e-bike was being used as replacement for car trips, walking or public transport.

The project won an Energy-Cities award and was said to be one of the best local actions to promote sustainability and CO2 emission reductions. This project will be part of a long-term strategy for urban mobility in Europe that goes beyond the 2020. It is focused on “e-vehicles” and the decarbonisation of the transport sector.

Future initiatives include developing an innovative parking and sharing system for smart bikes (BikeEmotion), using the WiMAX network installed in the municipality, which allows not only video surveillance of the parks, but also the detection of the exact location of the e-bike, number of available e-bikes and their battery capacity.

Outcomes (environmental, social, economic impacts):
It represents an investment of €22000 that facilitated the purchase of 10 e-bikes, parking structures and stands, a central station and a management system. More than 150 users have traveled more than 18000 km, representing an estimated saving of 2,5ton CO2.

The development of the project as per the:
Economy
Development of the “two wheel” cluster in Águeda;
Creation of a bicycle trade;
Reduction of daily commuting costs
Environment
Reduction in the emission of GEG;
Noise reduction;
Increased energy efficiency;
Reduction in use of natural resources
Social
Cultural identity of Águeda;
Mobility for all;
Quality of life.

The project aimed to improve quality of life through sustainable economic development based on hi-tech research led by local government in an integrated planning process.

The city of Genoa is working to a model replicable in other cities. A model of city governance able to use creativity from research, pragmatism from companies and vision from politics.

Outcomes (environmental, social, economic impacts):
Reduction of air pollution, increasing renewable energy in a Mediterranean area, increasing quality of life particularly for active aging.

The main strength is the cooperation between the different stakeholders deciding together and developing realistic approaches to sustainable process.

The projects main areas are ports, infrastructure, energy, buildings, mobility and social and cultural activities. Each of them has specific goals related with the municipality programs.
Case studies - session 3
Changing mindsets and behaviours

Almada’s approach to a smarter and eco-efficient mobility

**Brief/General description:**
Almada has been developing its local strategy for sustainable mobility for the past few years, to contribute to the green economy development model that Almada has adopted. Within this framework, the Municipality developed a coherent and structured approach to the needs of the different functions/services of the territory and the mobility of its inhabitants and visitors. The objective was to shift journeys to more eco-efficient transport modes (tram, bus, soft modes), combining physical measures, with soft mobility management actions. The results of this eco-mobility approach are becoming visible in the reduction of congestion, noise, CO₂ emissions and energy consumption in Almada’s transport sector. The second generation SUMP now under development embodies the latest methodological approaches and national and European orientations towards further reduction of the transport sector’s energy intensity. Increases in mobility efficiency in Almada strongly contributes to a better and more competitive local economy. This presentation will show the strategy adopted and the results of its implementation. Almada’s experience can be an example of how a medium/long term strategy can be beneficial. This case will show how good governance allows the development and implementation of studies and plans to make Almada’s mobility more sustainable. This case study will try to show how an eco-efficient mobility contributes to making Almada a smarter city. The close partnership established between the Municipality of Almada and the other local stakeholders was crucial for the good results obtained so far.

**Outcomes (environmental, social, economic impacts):**
The participated approach used allowed a wider intervention driven by the local government. The good results are now becoming visible and are expressed by better air quality in the city, lower noise levels and reduced CO₂ emissions, which are an important contribution to achieving Almada’s SEAP reduction targets set for 2020, in the framework of the Covenant of Mayors. Better accessibility is also contributing to reducing travel times, costs and number of trips, fostering a more competitive and less energy intensive local economy.

**Good practice – from theoretical to practice (Cluster Cooperation Green Technology)**

**Brief/General description:**
Competence cluster focused on energy efficiency and renewable energy sources. Platform for communication and cooperation between public sector, universities, R&D organisations and industry. Primarily focused on applied research, transfer technologies and innovations.

**Project is about:**
- Predictive and effective energy regulation
- Micro and small scale wind turbines
- Decentralised Regional Energy Systems
- Renewable energy resources (biomass, geothermal and solar energy)
- Technologies focused on measures and energy savings
- European Cooperation (Cluster Cord, C+)

**Infrastructure projects:**
- Centre Brno
- ENERGOKLASTR CTT Vysočina
- VTP AT Milovice

The case study shows cooperation between private sector, universities and companies.

Competence cluster focused on energy efficiency and renewable energy sources. Energoklastr should be a great example for other clusters or companies.

**Outcomes (environmental, social, economic impacts):**
Our projects incl. VTP AT Milovice, Centre Brno, Energoklastr CTT Vysočina are focused on energy efficiency and mainly renewable energy sources. Primary research focused on applied research, transfer technologies and innovations. Specific research is focused on predictive and effective energy regulation, renewable energy resources (biomass, geothermal and solar energy), etc.

All our projects are about improving our environment.

**Speaker**
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**Stakeholders involved:**
Local stakeholders
Local Energy Management Agency of Almada AGENEAL

**Speaker**
**Dr Jan Rakušan**

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**Stakeholders involved:**
CVUT,CU,BM, Centre for research and innovations (CVUT,CU,BM)

For more information on the project, please visit the following website: www.energoklastr.cz
Case studies – session 3
Changing mindsets and behaviours

“Mobility challenge”: an incentive for alternatives modes of transport

Brief/General description:
The mobility challenge is a new kind of challenge for both the public and private sector. The mobility challenge promotes types of sustainable mobility which are most appropriate to them. The mobility challenge is a tool of the Mobility Spring Program which could be used by employers whether they have signed a mobility plan or not.
The objective for the employer is to encourage, during a limited period of time, the largest number of employees using their own car to try other types of sustainable mobility, among a wide range of alternative systems proposed by the mobility companies operating on the territory.
Companies report their intentions and their results to Nantes Metropole; the best initiatives are then awarded by Nantes Metropole.
The mobility challenge is one action of the strategic mobility plan designed by Nantes Metropole.
This case study can be used as a communication and awareness tool everywhere. It includes measured results and impacts.

Outcomes (environmental, social, economic impacts):
Being the first project of this type at this scale, it’s difficult to anticipate the results and impacts.
The goal is to incentivise companies and their employees to try modes of transport other than individual car journeys.
The key stake is to promote an attractive offer of mobility services, adapted to the various territories and users: accessible, diversified, and coordinated.
This initiative is expected to trigger and accompany behavior changes due to:
- Information, awareness raising, mobility advice and support for new practices
- Accompanying the evolution of mobility needs: time management, adaptation of mobility services.

Speaker
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Session 3 – 18
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Stakeholders involved:
Companies (private and public), local authority, NGO, mobility operators and users
For more information on the project, please visit the following website:

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Stakeholders involved:
Companies (private and public), local authority, NGO, mobility operators and users
For more information on the project, please visit the following website:
Session 5:
Financing actions in tough economic times - case studies

3 case studies of innovation in financing.

1. Public Private Partnerships that work
Speaker: Jan-Olaf Willums,
Chairman and founder, InSpire invest
Private companies (Move About) offer solution of fleet management resizing permitting to compensate for higher cost of Electric Vehicles financing. These Public/Private or Private/Private partnerships permit to make inroads on EV use and permits multiple users of car sharing to get familiar with the new vehicle technology.

2. Procurement programmes (public or private)
Speaker: Heather Allen,
Programme Director Sustainable Transport, TRL

3. Citizen scheme
Tallinn awarded free public transport passes to its citizens following a city referendum
Speaker: Allan Alaküla,
Head of Tallinn EU Office, City of Tallinn
In many European cities public transport (PT) is already supported by subsidies of 70%. However, the pressure to raise fares is resulting in reductions in PT users. Free public transport (FPT) is one possible solution. The extra cost of FPT can be easily justified when compared it to previous subsidy levels.

Since January 2013 Tallinn started providing FPT to all residents of the City. This major urban innovation has three dimensions:
- Green – decreasing the car traffic in the centre of the city
- Social – providing better mobility to unemployed persons and those with lower incomes
- Economical – stimulating local goods and services

Tallinn’s annual budget has increased by 12€ million however this is covered through increases in the number of taxpayers. Further research and a longer monitoring period is required to fully evaluate the initial success of FPT in Tallinn.
More info www.tallinn.ee/freepublictransport
3 presentations on experience/actions to make effective connections.

1. CIVITAS
Speaker: Paolo Gandolfi,
Deputy Mayor, Municipality of Reggio Emilia
Connecting citizens to Europe To manage urban mobility new ideas are needed and also to convince citizens. Mobility is a service all city dwellers use. To make real change in this sector, with the support of citizens, good and effective examples of urban mobility programmes in other cities are needed.

2. Litoměřice (CZ)
Speaker: Antonín Tym,
Geothermal project manager, City of Litoměřice
Cities are nothing without their citizens, and the people who take on leadership and accountability - politicians. However, citizens still have limited access to the decision making process. This is, despite the fact that political decision-making significantly affects peoples’ day-to-day lives and defines cities’ development. Before a measure is implemented it has to go through different stages. One of them is evaluation and selection of a particular action. But how can citizens or civic initiatives control this process? What happens in the ‘black box’ where hundreds of suggestions and proposals go in and only tens go out and have a chance to get funding? Who decides and on what basis? Can this bargaining turn into a transparent and open process? This presentation will show that Local Agenda 21 can help cities to make the decision-making process more transparent. Moreover it facilitates implementation of big investments - such as a geothermal project in a small town.

3. Business connecting well with city
Speaker: Ger Baron,
Project Manager ICT, Amsterdam Innovation Motor
Amsterdam is known as a bottom-up Smart City. The combination of creativity, openness, entrepreneurship, innovation and traditional stubbornness, makes Amsterdam a city where hundreds of smart ideas are tested every year. This presentation will discuss why infrastructures and data should be open to everybody and why the development of a smart city is not something that should be limited to government officials, scientists or corporates.
The European Forum on Eco-Innovation exists since 2006 and has seen 13th fora taken place around Europe. Held twice a year, the European fora on eco-innovation bring together specialists from business, finance, technology development, academia, non-governmental organisations and other relevant stakeholders actively involved in eco-innovation and environmental technologies. With the new EcoAP, this objective is reaffirmed with greater focus on business stakeholders (especially SMEs), and with the aim to deliver key messages for shaping eco-innovation policies at European, national and regional level.

The Forum is held over 2 days and presents the latest developments in eco-innovation. Participants discuss a theme proposed by the EcoAP High Level Working Group, European Commission or host country. These fora are intended to be pivotal events and give participants the opportunity to showcase leading and emerging eco-innovations in areas of policy, finance and technology. Events are designed to facilitate cross fertilisation, to identify common objectives, to bring forward key issues that need to be addressed, and to mobilise for action. Each Forum event focuses on a theme and features a number of panel sessions relevant to that theme. The Forum is envisaged to be on the scale of around 200 persons.

The main goals of these fora are:
- disseminating innovative eco friendly ideas
- providing an efficient interdisciplinary collaboration framework for developing innovative and comprehensive solutions to the world’s critical problems
- giving leading and emerging eco innovators the opportunity to examine areas of policy, finance and technology
- raising awareness of recent research and policies
- encouraging innovation through communication between disciplines and sectors
- identifying key issues that need action by national governments and the EU
- helping mobilise relevant actors with common objectives
- developing concrete strategies for future action.

The outcomes of discussions and debates at these fora will be disseminated through the eco-innovation community. Recommendations are made for future action by the business and finance worlds, as well as national and European policy makers.

Previous forum:
- Lisbon, Portugal, 26-27 November 2012
  Developing new markets for eco-innovation. With a special focus on water.
- Amsterdam, The Netherlands, 25-26 April 2012
  Scaling-up sustainable construction. Through value chain innovation.
- Helsinki/Lahti, Finland, 11-12 October 2011
  Working with emerging economies for green growth
- Birmingham, United Kingdom, 22-23 March 2011
  Towards a Resource Efficient Economy - From Policy to Action
- Brussels, Belgium, 29-30 November 2010
  Financing the eco-innovators
- Bilbao, Spain, 20 - 21 April 2010 (cancelled)
  Making Eco-Innovation happen in Small and Medium-Sized Enterprises
- Copenhagen, Denmark, 23 - 24 November 2009
  Adapting to Climate Change through Eco-Innovation
- Berlin, Germany, 2 – 3 April 2009
  Technology transfer: Creating Partnerships for Stimulating Economic Renewal
- Budapest, Hungary, 16 October 2008
  Emerging Technologies for Eco-Innovation: Opportunities and Risks
- Vienna, Austria, 31 January - 1 February 2008
  Unlocking Global Market Opportunities
- Paris, France, 26 - 27 November 2007
  Boosting Eco-Technologies through Verification
- Brussels, Belgium, 11 June 2007
  Markets for Sustainable Construction
- Poznan, Poland, 21-22 November 2006
  Financing Eco-Innovation

The basis for these reports is the presentations, discussions and recommendations from each forum. The reports are written shortly after the Forum and available of each specific forum website.
European innovation partnership for smart cities and communities

The 14th European Forum on Eco-innovation provides an opportunity for participants from across Europe to inform the Smart Cities and Communities European Innovation Partnership with key messages and recommendations for action.

To address the specific issue of poor urban environment quality an approach that goes beyond traditional legislation is needed. Smart innovative solutions for implementation in cities and communities already exist. It is often their diffusion that needs to be encouraged. In this context, the Commission launched on 10 July 2012 a European Innovation Partnership for Smart Cities and Communities.

This EIP aims to help cities and communities, businesses and civil society to implement smart city solutions at much greater scale and speed. It is not a funding programme, but engages all possible organisations in the innovation chain to deliver on societal challenge, in this case reduction of greenhouse gases and improved quality of life in cities and communities.

Currently, the EIP is working on developing the focus and the types of actions for the future. A number of options are listed here. For example, new thematic and business models could be developed for meaningful exchange and assistance to cities, civil society and business for using smart city solutions to meet their local needs.

Other common issues that cities face are in the field of articulating public procurement of the best solutions, standards, and dealing with national and EU regulatory frameworks for smart city solutions. The High Level Group could also make recommendations on the purpose, features and types of support for large-scale demonstration and roll-out programmes. The group could set up a metrics frameworks to guide investment and assess best practice.

By autumn 2013, recommendations for actions by cities, businesses, community organisations, research organisations, and policy makers at local, national and EU levels will be presented in a Strategic Implementation Plan.

To get involved in the European Innovation Partnership for Smart Cities and Communities, go to the following website: www.eu-smartcities.eu
The forum is organised with the support of

For further information
Visit the official EcoAP website for the latest information on:
- Policy and Actions
- Innovative Technologies
- Funding resources
- Links and forthcoming events
- EcoAP news and other communication tools

Useful Links
- Eco-innovation Action Plan
  www.ec.europa.eu/environment/ecoap/
- Smart Cities Stakeholder Platform
  www.eu-smartcities.eu
- Civitas
  www.civitas-initiative.org/index.php?id=69
- International Council for Local Environmental Initiatives-
  ICLEI - Local Governments for Sustainability:
  www.iclei.org
- Covenant of Mayors:
  www.conventiondesmaires.eu/index_en.html
- Eco-Innovation Observatory
  www.eco-innovation.eu
- European Mobility Week:
  www.mobilityweek.eu

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