Gemeente Amsterdam

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PERFECT **(Planning for Environment and Resource eFficiency in European Cities and Towns)**

Minutes
Peer to Peer Meeting Amsterdam

Monday 7th May 2018

Location: Amsterdam GGD (Health department), Nieuwe Achtergracht 100,

Attended by:

Cornwall Council:

Rob Lacey - Principal Development Officer, Louise Wood - Head of Planning Policy, Jannette Smith -Advanced Practitioner Public Health and Rebecca Lyle -Transport Principal Officer Transportation,

Provencial Government of Styria:

Christine Schwaberger - Project manager/senior technical expert, Katharina Reifgraber - Project assistant, Marion Schubert - authorized official expert for town- and landscape Department for Energy, Housing and Technics, Waltraud Körndl - Landscape planner, Planning office Körndl, Johannes Leitner -External support PLANUM

City of Amsterdam

Age Niels Holstein - International project manager PERFECT, Imke van Moorselaar -Project manager Health department, Geertje Wijten - Policy advisor/coordinator green policy from - Planning and Sustainability department, Rob Bakker – advisor and financial manager EU projects. Nouschka Veerman – student Vrije Universiteit.

Welcome – introducing the first P2P-day

The Amsterdam PERFECT team welcomes the attendees for the Amsterdam Peer to Peer (P2P) meeting. A short overview of the program of the upcoming days presented.

Theme: **Air Quality, Health and Green Infrastructure**

Presentation of Saskia van der Zee, senior advisor/researcher of the Amsterdam Health Service

Air pollution is caused by a mixture of gases and particles from different sources, such as traffic, industry, energy supply, households agriculture and natural sources (volcanos and dust storms).

Most relevant for health in cities is the Particulate Matter (PM: also known as particle pollution) and Nitrogen Dioxide. They are an indicator for traffic intensity.

Sea salt is also PM. but doesn't have a negative impact on health. Thus it is a problem that it is not possible to distinguish this section of PM in measurement .

PM can affect the heart and lungs and cause serious health effects. Air pollution – Outdoor and household - is a silent killer and causes 4.2 million deaths worldwide. Especially in developing countries the household pollution poses a severe problems. It has a serious negative impact on lungs and cardiovascular health condition, resulting in 500.000 deaths annually in Europe. Air pollution ranks as the second environmental factor for burden of disease, after smoking. In falls within the same range as passive smoking and obesity.

The EU limit values are less strict then the WHO guidelines. The EU standards are met for 99%, but this cannot prevent the substantial numbers of deaths caused by air pollution . In 2020 new guidelines will be presented and the expectation is that by meeting the new standards death numbers can be reduced.

The introduction of low emission zones, traffic congestions zones, soot infrastructure and green infrastructure have boosted the improvement of the air quality. In different WHO reports the benefits of green infrastructure been mentioned. These include providing shade and cooling, rain absorption, stimulating physical exercise, positive impact on health and mental well being. But does urban green improves air quality?

Air pollutants are deposed on vegetation. Large green areas (e.g. national parks) can reduce concentrations of air pollutants. Still, in general only a small fraction of the air pollution will be in contact with vegetation, and therefore only a small fraction of the emissions will be deposited/absorbed by the vegetation. In addition to that we must notice that deposition is not leading in improving air quality. Only the concentration of PM in the air has an impact on our health condition.

Is planting vegetation in busy streets a solution for the air quality? If we take the PM-10 emission in the Amsterdam Valkenburgerstraat as an example. In this street a City-tree experiment is run. It faces 19.000 vehicles per 24 hours. The PM-10 emission results in 155 kg every year. Only 1% comes into contact with trees.

If we would assume that all emissions from traffic reaches the trees and ALL emissions are absorbed by the trees, we would need to plant 1.550 trees along a 500 meter road to capture all the emissions by deposition. This is totally unrealistic. The only proper solution would be to reduce the emissions at the source!

We can conclude that there are many benefits of GI, including health, but GI will not solve the problem of bad air quality. Hypothetically technological solution to clean the air could work; such as the Chinese anti-smog tower and the Amsterdam City-Trees . But this would only apply to air enclosed in sealed boxes and not to an open air situation.

Trees in busy streets will lead in some configurations to a lower rate of dispersion in the air. Higher concentrations of air pollution is then a documented negative effect. This impact is referred to as the 'street canyon' effect.

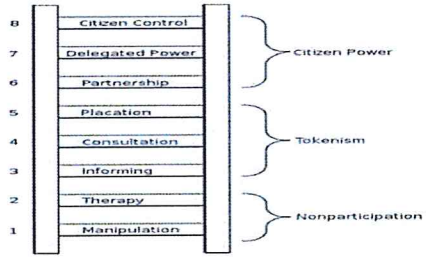
The scope of the health benefits from GI is much larger then the improvement of air quality. GI could be important to induce a modal shift towards sustainable traffic choices, by offering more opportunities for alternative transportation; e.g. by bikes. A better air quality is often used in the list of ecosystem services GI can provide.

Because of the research results we must be careful and/or nuanced in sending out this message. It seems wise to highlight positive health impacts by GI in general, and address improvement of air quality only in this broader context, thereby providing the appropriate information on this topic.

Theme: **Policy making and Participation in Green Infrastructure planning**

Participation ladder in Green Infrastructure planning

Because the City of Amsterdam owns approximately 80 % of the land, the local authority can often steer at the outcomes of the planning processes directly. In the Amsterdam planning system ('Plaberum') it is mandatory to address participation in an appropriate way. Amsterdam makes use of the participation ladder to assess at which level and intensity participation in a specific planning process should be initiated.



In the implementation of the Amsterdam Green Agenda and other green policies many stakeholders are being interviewed. During these interviews the participation ladder is also used to inform 'where we are' in the planning process, what the planning targets are and how communities can and will be involved in the process. Much knowledge can be acquired from our communities.

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In the project "We Amsterdam" *Raging Reporters* try to get as much as information about the level of participation that is needed/wanted by our communities. The starting point for this is the context of the planning process, target group and stakeholder analyses. This leads to an informed decision at which level of participation community involvement and engagement is organised: information/consultation/ co-decision; co-production.

Jan Henk Tichelaar represents 'De Gezonde Stad' (The Healty City). This is a NGO. The initiative called '*Rooftop Revolution*' started two years ago.

The mission of rooftop revolution is: Bring unused rooftops to sustainable usages.
The strategy of *Rooftop Revolution* is to inspire people, to provide information and to organize and join events; thereby promoting joint investments, which help to overcome split incentives in achieving sustainable development. Fragmented ownership and non alignment of interests of stakeholders are the most important barriers. The realisation of green roofs is a time consuming process. Rooftop Revolution starts with meeting people and talk to communities about option for their roofs, trying to link it to concrete projects as soon as possible and raising awareness by all who are concerned. Investments and costs are big issue. Investors are not always the primary beneficiaries. Based upon experience *Rooftop Revolution* has distilled a good ratio in division of costs in the needed investment in a green roof:
1/3 by the municipality, water board and social housing
1/3 by real estate owner
1/6 by companies
1/6 by the individual household

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To increase the number of green rooftops Rooftop Revolution works within a sector based approach. For the **Hotel sector** a free scan of roof tops is offered. *Booking.com* supports scans of the hotel roofs because they consider a green roof a valuable and avertable asset. Hotels with green roofs had less vacancies in the recent crisis.
In the **Social housing** sector housing associations and municipalities are engaged.
In the **Business sector** multiple benefits of different kinds can be highlighted. Green roofing could increase the value of real estate. Health and well being of employees can also be relevant.

After two years Rooftop revolution there are some lessons learned and recommendations :
The subsidy scheme for green roofs was very important: Without such an incentive it will take more time to have a substantial growth of
Accelerate by sector approach, every sector needs a different approach
Link to local problems, including the local problems gives a boost
Time consuming, duration of the process, it takes a lot of talks to convince.
Regulation: New constructions, do make a green roof mandatory.
Subsidy: existing construction is fine.
Create awareness: generally the more awareness the smoother the process is going on.

In the discussion following the presentations it was highlighted that trials are often a good method to raise awareness in communities, but conditions to do this successfully are not always met. In the United Kingdom, local communities have the ability to make their own plan. Every green roofing project is unique , so options for good community involvement are related to phases of the project and have to be tailor made. The participation ladder of Amsterdam takes account of a wide variety of different phases in the participation process. And in a mandatory situation the quality of Green infrastructure solutions can pose a problem.

Excursion/ site visit:
Extra attendants: Anjo Reusink and Vesna Janjac - Program ERDF EFRO Kansen voor West 2

- City tree Valkenburgerstraat
- Demonstration project "Noorderpark" / Visit too ERDF funded project "Noorderpark"
- Healthy city "Park around the corner"

City tree (Valkenburgerstraat)
Every day 19.000 cars produces particulate matter. The PM10 emission is 155 kg on a yearly base. Only 1% comes into contact with trees. We would need 1550 trees on the 550 meter track of the Valkenburgerstraat to capture all the deposition. This is totally unrealistic.

The Valkenburgerstraat is one of the eight City Tree locations in Amsterdam. A City tree is filled with moss. It is claimed this would be equivalent to 250 trees. The costs of 8 City Trees amount to € 200.000 euros. Research costs would approximately amount to the same.

Demonstration project "Noorderpark" / Visit too ERDF funded project "Noorderpark"
After a biking trip through Amsterdam, crossing the IJ river by the ferry, we visited the Noorderpark in North Amsterdam. The *Noorderpark Trust* presented all the activities they are developing. These activities clearly link Green Infrastructure to the Amsterdam jobs and growth agenda. Start ups of small businesses related to park activities are being supported.

The meeting took place in the Pink Tanker, which is a transformed petrol stations now used as a venue for community activities. The Noorderpark Trust activities are partly financed by the ERDF.

Healthy city "Park around the corner"

After continuation of the bike ride we reached the Vegastraat in Amsterdam North. De Gezonde stad (healthy city) is subsidized by the City of Amsterdam. Among there activities are the coordination and facilitation of citizen initiatives to create a '*Park Around the Corner*' (Park om de Hoek). The park at the Vegastraat is also an initiative of the neighbourhood. The neighbourhood residents were not satisfied with the existing playground and took the initiative to regenerate this part of the neighbourhood . It took a long process of community engagement to design and create a new neighbourhood park. This pocket park allows for usage by all age categories: from little children to a football/basketball field for the young adults. The maintenance of this *park around the corner* is a shared responsibility of the residents and the local city district.

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Minutes
Peer to Peer Meeting Amsterdam
Tuesday 8th May 2018

Location: Amsterdam, Academie voor Bouwkunst, Waterlooplein 213

Welcome – introducing the second P2P-day

The Amsterdam PERFECT team welcomes the attendants of the second day of the Amsterdam Peer to Peer meeting. A short overview of the program for this day was presented and there was an exchange of thoughts on the lessons learned from the first day of the Peer to Peer meeting

We learned that:

- Air quality will not be improved by green infrastructure exclusively. Appropriate communication on the multiple benefits of Green Infrastructure is very important. Use the right language to reach the target groups.
- Green roofs demonstrate a wide range of benefits, including the enhancement of the biodiversity.
- Realising a *park around the corner* can take a lot of time, from idea to realisation.
- It is important to work together with the community.
- The Amsterdam City Tree is predominantly a PR instrument.
- There are serious biking traffic jams in Amsterdam!
- If there is no funding available, soft measure (such as community support) can help to create behaviour changes.
- There are different levels of participation. A differentiated the sectoral approach (as adopted by the Rooftop Revolution initiative) seems to be promising.
- Green infrastructure can be helpful to create a behaviour change towards sustainability.
- The Noorderpark has been improved by diverse regeneration activities. PERFECT evaluates the improvements by studying the changes in the use of the park. More residents are physically active in the park. In general there seem to be more activities in the Noorderpark. We suspect this will also give a positive impulse to counter social problems in the neighbourhood.

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Theme: **Environmental Planning Act (Omgevingswet) and Cross departmental working – stakeholders**

The new environmental planning act is affecting all governmental levels in the Netherlands. From the national, to the provincial but also the water and health organizations such as Waternet and the GGD (mental health organization). The environmental planning act is the merging of approximately 26 laws and incorporates rules from other acts combined into one environmental planning act. The environmental planning act covers, amongst other; environmental protection, cultural heritage, nature conservation, water management and urban and rural development. With the environmental planning act the diversity of policy and legal instruments is reduced. Furthermore, it creates uniformity in procedures and the planning act is designed to align more with relevant EU Environmental Directives. The environmental planning act introduces a new legal system, which orders the rules for the physical environment differently. In this new act there is more room for participation but the Act doesn't prescribe how to facilitate participating.

This is a task for every authority. Local authorities can set higher standards then formally is needed by national law.

The introduction of the environmental planning act, and the merging of several acts imply that it will be easier and more transparant which rules apply on a certain location. If you have an initiative for the living environment the application process is simplified: Only one, or a few, permits are needed since the legislation is gathered into one act. This will make it easier to launch an initiative for the diverse users of public space.

The merging of regulation does not mean that certain laws will disappear. After the introduction of the environmental planning act the approval has to be granted, but the different authorization bodies have to do this together for one permit. If several governmental levels are involved, they have to align their policy. Moreover, the approval has to be granted within 8 weeks. Therefore the environmental planning act will not make this simpler and easier for the local government, and cross departmental working is more and more necessary under this new act.

Amsterdam is having a long tradition of strategic and environmental planning. New themes as air pollution, health, and underground infrastructure are very demanding and clearly related to green infrastructure too. The pressure on public space is increasing more and more. Cross departmental working will be a necessity, because cooperation and finding combined solutions are needed to meet legal time frames.

The Planning system in Styria is a well-defined system, which provides for guidance in green and blue spatial planning, environmental assessment in spatial planning and regional development. These are all integrated in the planning system of Styria

The Planning system in the UK – Cornwall. The UK laws are based on the EU laws. With Brexit a lot of the law will need to be rewritten. This could also create new opportunities. With local plans communities can make new places and thus create a win - win situation.

In general: Planning systems are a necessary condition for sustainable development. At decision stages we still find that by the economy and politics can have priority.

Both Cornwall and Styria are exploring various options for cross departmental working, as in Amsterdam. This is needed to address new themes like air pollution, health, underground infrastructure and climate change impacts appropriately.

Theme: ***Green maintenance approach***

The city of Amsterdam is providing the citizens or community groups financial and managing support in their green maintenance approach. The yearly budget of € 2 million was an initiative of the Amsterdam City Council .The green approach is a new approach to involve citizens. The city of Amsterdam is divided in 7 city districts. Every city district decides on community participation at the practical level. The scale of community initiatives vary from tiny initiatives, like creating small gardens in front of the dwellings, to bigger initiatives such as the creation of temporary allotments in the urban regeneration of Amsterdam.

The City facilitates the co-creation process of the initiative. The initiators will be responsible for maintaining the quality of the new green infrastructure.

In South east of Amsterdam, the topic of Urban gardening is a hot issue. With the initiative of some volunteers a rather large area is now being used for urban gardening. The harvest and maintenance is the responsibility of the volunteers.

A specific issue in this procedure is the risk insurance. The city of Amsterdam is in general responsible for the maintenance of public space. By partly devolving the design, the exploitation and the maintenance to private parties, still the City of Amsterdam will remain responsible as owner of the ground, in case of accidents. Question is how are the insurance issues in the UK and in Austria is dealt with.

Excursion/ site visit:

1. Demonstration project: Greening of Schoolyards (Annie M.G. Schmidt school)

We visit the Annie M.G. Schmidt school and are welcomed by the Chris Mulder (school director) and Jan van Schaik (school yard designer). The school director explains the specific situation of this schoolyard, as it is situated in the inner court of a housing area. The teachers , the parents and the residents neighbouring the court all participated in the planning process to green the schoolyard. The parents raised funds by crowdfunding and helped in creating this new schoolyard. All materials were being reused within the new design of the schoolyard. It is suitable for all children from 4 till 12. Its gives the opportunity in having the classes outside in the open fresh air. Both teachers, pupils, parents and the neighbourhood are very satisfied about the result.

As it's an inner schoolyard, it was closed for the neighbourhood after school time. With the new use its open after school time and open for children to play

2. Beatrixpark – Akzo Nobel

On the borders of the Beatrixpark the new office of Akzo Nobel is situated. The parking garage is closely connected to the park. Its design is fully integrated in the park. The roof of the garage is a water retention roof, which has the function of water storage. The roof is public space and the contract for the maintenance of the premises is for the private owners of the complex.

3. CIRCL-building

We also visited the CIRCL-building of ABN AMRO. Geertje Wijten explained that this private bank is promoting sustainability, invests in new concepts to visualise the circular economy.
The building has its own solar panels for electricity, heath pumps for the heating, green walls, and the building itself is totally suitable for recirculation. The garden has been designed with recirculated materials.

4. Kindercampus Zuidas

Next area and building is the Kindercampus Zuidas, this temporary sustainable building is a kindergarten in combination school for children from 0 to 13 years old. With several playgrounds including a large natural playing grounds the children can explore the nature. The design of the play ground is also from Jan van Schaik (designer schoolyard Anne M.G. Schmidt school). The combination of the sustainable and natural building is a unique concept, especially with the knowledge that this building is situated in the most expensive business district of Amsterdam.

5. Polder roof of Amsterdam

With a visit to the Breevast building, we discovered the largest *Polder Roof* of Amsterdam. The surface of the rooftop is 2.150 m2, of which 1.600 m2 has become green infrastructure. The polder roof is cooling the surface. Because of the planting scheme the biodiversity has been increased. In the roof new technology and monitoring equipment has been integrated .The roof has a water retention function: On every m2 the water storage capacity is 70 litres. The polder roof has a recreational function for the employees in the office building . This polder roof with 1.600 m2 is the start of the realisation of 22.000 m2 polder roofs in 2020 in the business district Zuid As.

6. Zuidelijke Wandelweg

Kasper Spaan (Waternet-Rainproof) demonstrated the ecological urban infiltration strip in the *Zuidelijke wandelweg (Zuid-As)*. This strip is used as a temporarily storage of rainwater after heavy rain. To avoid rain water is overloading the sewer system, the rainwater from the rooftops,

but also from street level, will flow into the infiltration strip. The strip is below street level. The strip is a habitat for plants that need a lot of water. Using vegetation for water storage in this way is innovative. The water can be retained for 24 hours. It will slowly infiltrate to ground water level.

Thank You all for making this P2P meeting a success