

A new look at urban city development

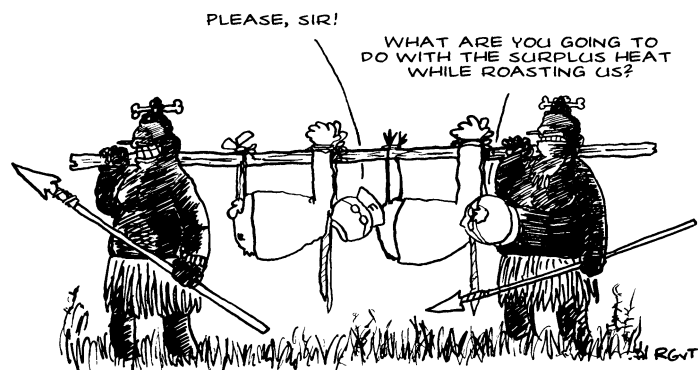
How do we build an economical model to finance an area oriented development in the future? With what legislation do we have to deal with an area oriented approach? These two themes were June 8th and 9th the main topics of the www.CityChlor.eu conference in Utrecht "Social economical aspects of sustainable city development".

One of the main goals of CityChlor is to develop an integrated approach for contaminated site management. CityChlor will make the change possible from traditional "single-case treatment" to an area oriented approach. With this new approach CityChlor also wants to contribute to the further development and increasing effectiveness of national action plans and funding programmes for the reduction of groundwater pollution and contaminated sites.

In this report we present the results of these two expert meetings. We are on the brink of transition, that is in the near future there will be a new approach in the field of soil remediation and urban redevelopment. There will be new rules which lead to more opportunities.

The general conclusion of these two expert meetings was that public and private has to join forces. The time that the authorities are in the lead, but also that tax money is used to pay for urban city redevelopment is over. Specialist with different backgrounds, such as economics, finance, juridical, urban planners, architects et cetera has to work together on a vision. Long term planning is needed to finance durable city centre redevelopment.

FOKKE & SUKKE TRY TO BALANCE THE PARADIGMS OF THE OLD AND NEW ERA



The CityChlor project will continue. You can read about our activities on www.citychlor.eu.

June 8th “How to create funding for an area oriented approach”

Chairman **Mr Paul Kouijzer** (Municipality of Utrecht)



Vision on modern financial fundings and earnings of redevelopment of city centres.

By **Eduard Ravenhorst** (BGO)

The path to follow ultimately leading to a more sustainable and integrated approach in inner-city redevelopment including sustainable remediation strategies in the Finance and Revenue Models for Inner-city Redevelopment.



Transferring a problem into a solution?

The integrated approach improves the quality of soil and groundwater, a sustainable urban spatial planning and improving environment quality. The question is how a more sustainable and integrated approach in inner-city redevelopment can be achieved and how sustainable remediation strategies can be included in the Finance and Revenue Models of a Sustainable Economic Area. What preconditions have to be faced and how to get there?

Hart of the problem

In present time, highly educated and specialised professionals, work in specialised sections and departments with limited responsibilities, mandates and means, and often under compliance of strictly vertical structured business and/or government rule. This phenomenon is in today's Financial and Resources crisis (2009) basically well understood by all relevant parties in civil society, be it markets, governments, science and/or citizens alike. However, an effective broad horizontal approach is up to present non existent, because of the still dominant vertical single issue structures of business and society and because of the highly specialised professions that can not or will not communicate with and amongst each other.



Part of the problem is, that professionals do not know much about each others businesses and profession, and do lack adequate mandate and authorization for acting in a broader acceptance for a sustainable integrated approach. They are not in a position within their jobs, to facilitate their governmental and/or business boards and prepare operational sustainable policies with relevant societal and business partners, let alone to dispatch such operational policies timely.

Solutions (by new game rules and providing for a lifetime learning & development environment)

We need to find balance in the new and old way. Therefore we will have to ask ourselves two essential questions:

1. How to overcome the vertical structured knowledge and communication patterns in business and society
2. How to enhance authorisation and mandates for professionals to interact horizontally in sustainable co-maker participation with other societal stakeholders and claimholders, as a precondition for the sustainable business case, and the new finance and earning models of sustainable business development.

To find the answers to these questions we have to develop on the regional and city scale and scope scenario envisioning abilities, strategic planning and flexible response abilities, all this in a lifetime learning cycle.

Go with the flow

Sustainable City (Re)Development takes about 20 years and more. So you develop for the future and for the next generation. This can only successfully happen in a consistently structured education and development process in which all relevant parties from government, big business and from the third domain of citizens, SME 's and farmers, join their best efforts in the years to come.

On the way from old to new we will experience trials and errors

The jointly experienced and accepted civil responsibility (structured by game rules and learning environment) will add to the implementation of integrated sustainable (re)development along with underlying financing and earning models, focussing on both sustainable sector development business opportunities and sustainable regional and inner city economic (re)development opportunities.

Path to follow

Is this the path to follow ultimately leading to a more sustainable and integrated approach in inner-city redevelopment including sustainable remediation strategies in the Finance and Revenue Models for Inner-city Redevelopment?



Sustainable Buildings

By Ms Lara Muller (Corio)

Lara is manager corporate social responsible entrepreneurship at Corio. Corio is the owner / developer / administrator of shopping malls, such as “Hoog Catharijne” in Utrecht, and in six other european countries.



A mall is in essential a major polluter and producer of CO₂, but on the other side it has a social-economic impact: think of jobs, entrepreneurship and shareholders. Corio will integrate sustainability completely in its policy and sees it as an essential for its existence. Therefore Corio will build in the future sustainable buildings instead of CO₂ neutral buildings. It is about the integration of environmental, social and economic sustainability.

Corio wants to develop new "green" leases (GreenLease), where rights and obligations on energy, materials, data exchange on energy are recorded. Beside this agreements are made on maintenance, human rights, labour rights and other social values. The value for Corio of their property will be 6% higher.

Corio looks at added value for the parties involved: workers, residents, suppliers, etc. How can you create co-operation to achieve a durable business? The primary objective (common interest) should be widely supported and understood by all parties and implemented. The parties are persuaded to participate in such in ‘Hoog Catharijne’. Enumerate advantages and name disadvantages as they do not participate. Social and Financial Return on Investment (ROI) are the key to Corio. Sustainability is a long term investment. Because it has a common interest, the government will always have a great interest and is not comparable to a market party. By bringing all parties together in such a project you have different fields of expertise within the project and there may be benefits from it.

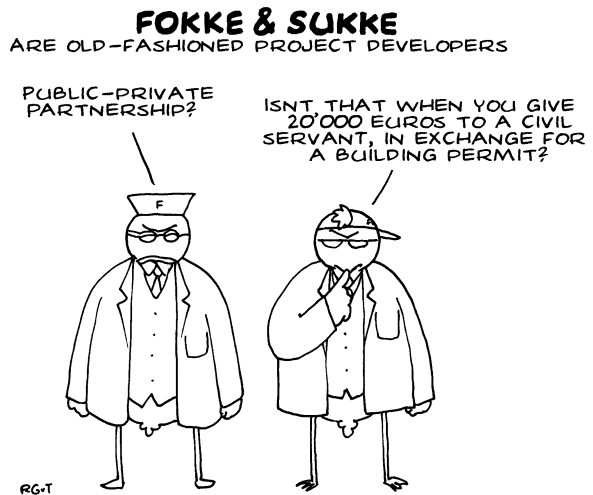
Conclusion:

- cooperation between business and governments is necessary (PPS), where everybody does in what he is good at and where every party takes his own responsibilities;
- First prepare a joint vision document, which mentions the common interests;
- Brainport in Eindhoven is a good example because of the cooperation between business and government.

Profitable earning models

By **Charlotte Nauta** (BMC)

Charlotte is in collaboration with TTE engaged in the projects “Ondersteboven” and “Voorbij de ondergrond” for the Ministry of Infrastructure and Environment of the Netherlands. This deals about business models and cost-benefit analysis of remediation and redevelopment of brownfields. Contaminated sites sell poorly and the government can still enforce remediation. This is the main factor which slow down the revitalization of brownfields. How can we change this was the main topic for discussion.



The Dutch soil covenant “soil development and strategy for urgent sites” aims to achieve a transition in soil remediation and protection oriented towards a comprehensive policy on the subsoil. From 2015 the subsoil will be integrated within the field of spatial planning. It thus creates new opportunities for gains from the subsoil to be used in spatial development. A successful redevelopment of contaminated sites provides a tremendous quality of the urban area, but requires a dramatic change in the organization and financing of the restructuring of contaminated sites.

Important principles are: “the area is the central spindle”, “the user defines”, “total value of ownership”. This all sound simple, but the debates made it clear that the recognition and acknowledgment of the problem are: sustainable development of contaminated land is an organizational issue. With regard to the possible solution, there was less consensus. These can be found in technology, communication and influencing perceptions and approaches to integration of subsoil and topsoil.

Conclusion:

- to break the vicious circle of high remediation costs, fear of risks and therefore far too high soil remediation costs a fundamentally different approach is needed;
- public and private parties has to work together. This requires leadership and entrepreneurship;
- it also requires a vision of values and/ benefits that focuses on the long-term;
- this also means that the government has to choose a clear role or position in the process;
- in the end it is about a tailor made approach and the deployed tools,

Brownfield Land Management Cycles

By **Tim Grotenhuis** Wageningen University and Research Centre (WUR).

Tim works at the WUR, Environmental Section. He is a researcher in the European research Holistic Management and Brownfield Redevelopment (HOMBRE). The term brownfield refers to a site both in rural and urban areas which is in decay, for example by closing a plant, pollution, abandoned mines, impoverishment. We examine how we can revitalize areas and how we can recognize signs of decay which develop brownfields. Aiming at a brownfield-free future. Basic idea is based on land management cycles. Planning, use of an area, economy, reducing, unemployment etc. Now, new impulses for brownfields. Eventually creating a future with zero Brownfields.



Spatial planning is moving from a two-dimensional to a three-dimensional approach. Of interest is a balance between sustainable use of materials on the topsoil and sustainable use of energy and water in the subsoil. Re-use building materials and raw materials as much as possible from the brownfield or re-use them within the region and within the area of origin. Do not start with money. "For a good project is always money." It starts with a good idea, this comes down to creating a CO2 neutral residential and working area. From energy, CO2 reduction and sustainability it becomes attractive for parties to participate. As for the pollution: groundwater remediation and contamination is removed in time

Conclusion:

- sustainable goals, brighter future;
- policy should be to invite stakeholders to the table;
- stakeholders should become partners with a good story (this includes the government);
- get more stakeholders involved to focus on solutions and not on problems.

June 9th “Possibilities within legislation for an area oriented approach”

Chairman **Mr Peter Kiela** (Ministry of Infrastructure & Environment)



Vision on the future of European environment legislation

By **Mr Edward Brans** (Pels Rijcken & Droogleever)

Nobody in the Netherlands owns groundwater. He who pumps it to the surface becomes the owner, but how does this work for heat or cold generated by ATES (aquifer thermal heat storage) systems. This is a question which is not easy to answer, although it might be a relevant question in those situations where space for ATES is limited such as the case in Utrecht where systems might interfere with each other.

In Utrecht they are applying an area oriented approach to remediate polluted groundwater. The aim is to reduce pollution within 30 years by making use of ATES systems. Does this fit within the EU groundwater directive. The answer again is not easy to answer, although the general opinion is that an area oriented approach fits within the groundwater directive.



An other problem is how can we get/force all problem owners in an area to participate -and pay- for an area oriented approach? Here lies a task for the local authorities. They have the tools within the soil protection act to force people to do research or to remediate. These tools are seldom -if not at all- used. This might be the key to make an area oriented approach a success.



Procurement principles for an area oriented approach

By **Gerrit Kremers** (Purple Blue).

Gerrit is a lawyer involved in the area oriented approach in the station area of Utrecht. He is also busy writing a thesis on this subject at the University of Utrecht.

The polluter pays principle means that in principle the polluter pay the bill for the cost of remediation. Shifting of costs to the society would lead to competitive advantage. In practice, the polluter often does not pay for the pollution (by legal concepts such as

causality, guilt, etc.) or because the perpetrator is deceased, bankrupt or the pollution is "historical". In the Netherlands there is a boundary between pollutants which lead to contamination before 1987 and after 1987. Belgium has a flexible policy regarding exemptions: 80% of applicants get relief from remediation obligation. In the Netherlands, the owner shall be deemed to be familiar with the risks of buying contaminated land. The costs for remediation are taken into consideration (example of Philips in Eindhoven) with transactions.

How can the polluter-pays principle be taken into account for an area oriented approach?

You can find a distribution keys based on the size of the land or the land portion of the polluter

You can make a cut at 5 or 10 meters deep. This is arbitrage but disconnects plume and source and provides opportunities.

The standstill principle is aimed at preserving the environment. The environmental quality should not deteriorate.

How is this concept to match with an area oriented approach?

A comprehensive understanding of the environmental concept offers opportunities: for example in terms of sustainability and energy (ATES) there is a profit, in terms of distribution of groundwater pollution there is a loss. Accept a partial negative interest. The totality legitimise the area oriented approach.

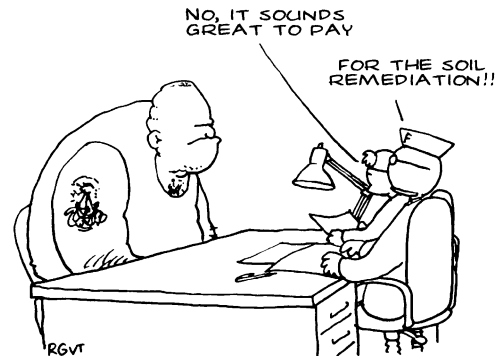
For groundwater contamination: make agreements with all parties involved for conditions of pumping of contaminated groundwater. In the port of Rotterdam, for example, worked with a system limit on estimation. In addition, a compliance boundary: where the pollution is really not allowed outside. This requires an extensive monitoring programme.

The standstill principle is at area level. The standstill principle provides room for creativity. Escape from the strict application. You should just be consistent and well thought about what to do, then you are legally far.

Conclusion:

Area oriented approaches are more complex than single case pollutions. Therefore a wider view of the complete environment is needed to judge if a specific approach is in objection with the juridical international accepted principles.

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ARE AMONG THE BIGGEST POLLUTERS OF THEIR CITY



Entitlement to a sustainable area oriented approach

By **Mr Jurgen van der Heijden** (AT Osborne)

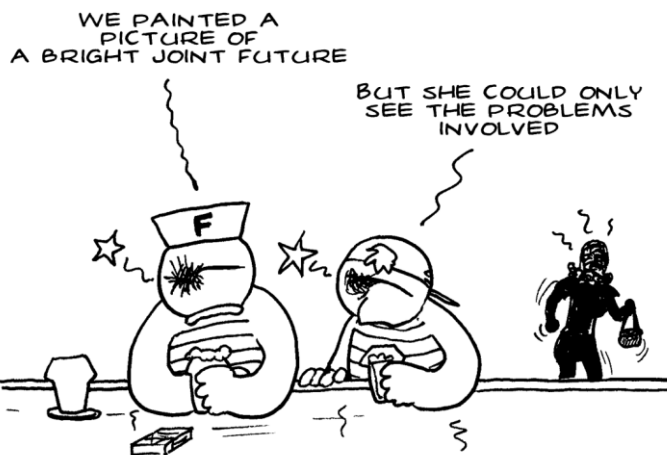
Jürgen works at AT Osborne and is affiliated with the Centre for Environmental Law of the University of Amsterdam and also involved with the Netherlands Centre for Soil Quality Management and Knowledge Transfer (SKB).

Metaphor 1: tree with many branches connected. An ever growing system of activities, and at the same time an ever growing system of combinations between these activities.

Metaphor 2: tree with many branches growing on and on. An ever growing system of laws for every new field which the government wants to control.

Metaphor 1+2: since most combinations are sustainable, they comply with the law, no matter how complicated the law is. However, some sustainable combinations are blocked by law. Is that right?

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R&VT

Today there are more and more combinations and links between social functions. Think of the combination of soil remediation with thermal energy storage or the forests of “Natuurmonumenten” which are used for water supply by “Brabant Water”. In addition, there is an increasing ramification of the legislation. The number of interests protected by the law is continue growing, think of legislation for the obstruction of light and vibrations.



In fact, for only 1.5 percent of the cases current legislation does not meet. But is this the whole story? How many new durable ideas –included smart function combinations- will not see the daylight, because initiators fear legislation and its consequences. This leads to the widespread perception that environmental legislation is obstructive.

Jürgen argues that the solution may lie in allowing a general hardship clause in the new law “Kaderwet Omgevingsrecht”: if one has a good story for developments in terms of sustainability, then it should not be obstructed by a single law (“implement a valve to get the pressure off”). Within legislation about city and environment and the Dutch Crisis and Recovery act people already work according to this principle. Example of City and environment is given: Where a flat with gym is built on a highway and the lower levels are not used for occupation.

Belgium has a new law on mandatory testing for deregulation. One has to see whether a new law is needed to prevent proliferation of rules. Can a similar law at European level for an area oriented approach offer a solution here?

Conclusion:

The concept of sustainability is constantly developing and is not a hard one. This calls each time for a sustainable plan to achieve, sometimes called CO2 reduction and at other times renewable energy. For these developments it is essential to make use of civilians. This might prevent interference of a judge. If it does go to court, the durability of the plan should be the breakdown. Problem is that for a judge should be clear that a plan is durable although in obstruction with some legislation. Durability is not a fixed definition and evolves constantly, it is therefore difficult to substantiate for a judge.

From single case towards an area oriented approach

By **Mr Henk van Zoelen** (NL Agency – Soil+)

Henk is head of Soil + and has 25 years experience in soil and groundwater remediation. There are now approximately 15,000 sites remediated in the Netherlands. These are mostly single cases. The still remaining cases are particularly complex. Henk expects for the future, that an area oriented approach becomes increasingly necessary, and that issues of surface are more and more combined with an area oriented approach.



Think in possibilities, then there are resources available to fulfill your goals. As an example, Philips in Eindhoven was mentioned. Philips was the owner of a contaminated site (VOC and other substances) and had for a long time a passive attitude. This changed when a developer wanted to build at the site. Philips wanted to sell the land and alienate themselves from the pollution. Parties came with the following solutions:

- ATEs combined with a heat pump system was included in the plan
- There was a sound business case
- Parties remediated the soil up to six meters minus surface, decreasing the risk of subsequent spreading or intrusion of pollutants
- The municipality was prepared to take over the legal responsibility of the pollution in the future. The pollution contour is wider and is even outside the development area.
- Contaminants have been purchased by the municipality and the money is "earmarked" for remediation

Conclusion:

Importantly is the redevelopment of a city centre. Remediation and development are two different things. Try to find smart combinations, eg soil pollution and durable energy to tackle groundwater pollution or what is the need for green in the city and can we isolate the pollution in the subsurface. In short, think in chances, then there are resources available.

