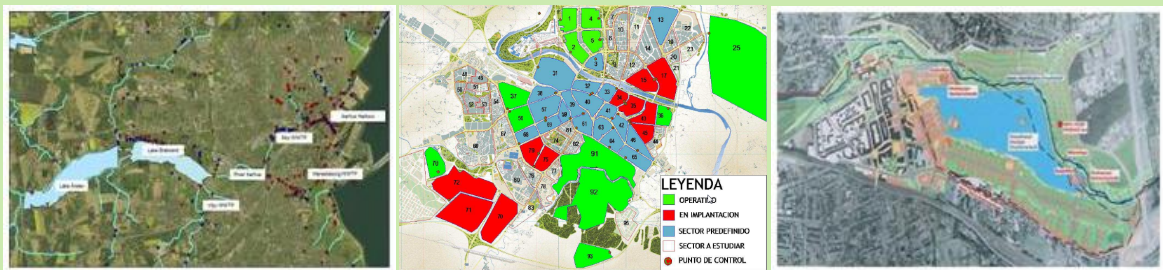


GOOD PRACTICE IN URBAN WATER MANAGEMENT

DESSIN policy brief #2

Increasing chances of innovation uptake through governance

A guide for technology companies and water utilities



New technology is a key element in tackling challenges faced in urban water management, such as poor water quality and increased water scarcity. New approaches are more likely to turn into real innovations (actually implemented and taken up by the market) if there is evidence of their benefits or added

value in economic, environmental and social terms.

This brief provides a series of five process recommendations for water innovators, designed to help them increase the chances of innovation uptake.

The FP7 DESSIN project, funded by the European Union, responds to this requirement by demonstrating and promoting innovative water solutions. **The project is built around five demonstration sites across Europe, where these solutions are being tested and validated. DESSIN is also developing a methodology to value ecosystem services (ESS) improvements associated with the uptake of these technologies, thus enhancing the evidence base of the multiple benefits of tested innovations.**



1 GOOD PRACTICE 1: ISSUE LINKING AS MEANS TO GAIN BROAD SUPPORT AND LEVERAGE FUNDING

The strategy of issue linking - the linking of dimensions to a problem and the combination of two or more solutions- has often been observed for entrepreneurs in literature, and was also observed in the project case studies. For water infrastructure, with typically very significant capital costs, issue linking can help bring together multiple sources of funding that make implementation possible.

An interesting example of issue-linking was found in the Emscher catchment, where a lake was developed on the site of an abandoned brownfield. As a result of linking multiple objectives (e.g. flood risk management, urban development, nature protection, recreational opportunities), benefits were created

simultaneously for multiple actors. The active search by project developers for multiple benefits helped leverage and save money, as well as build supportive coalitions. However, whereas agendas can meet, specific objectives may still diverge and will require compromises.

Issue-linking can also take the shape of 'common good' innovations, from which society as a whole benefits. This was the case in Zaragoza, where actors worked hard on creating a larger unified 'vision' for the population, in which the proposed water saving actions made sense.

Example 1: Seeking compromise in the Emscher

One of the key success factors for the realisation of Lake Phoenix in the Emscher was the successful linking of different actors, goals and ambitions. Most eminent example in this respect is the compromise that had to be made regarding the actual size of the lake. Conflicts occurred between actors wanting to maximise real estate opportunities (and financial gains) and other actors pledging for a bigger size of the lake to ensure its ecological viability and maximise its attractiveness and flood protection potential. Relational management, and the shared wish for a successful project, meant that eventually all actors involved were willing to find mutually acceptable compromises.

More information can be found at: <http://www.eglv.de/en/waterportal/emscher-conversion.html>

2 GOOD PRACTICE 2: FINDING SYNERGIES WITH OTHER ACTORS AND BUILDING COALITIONS TO CREATE MOMENTUM

Coalitions can be instrumental in influencing innovation uptake. Such coalitions may be built on the multiple beneficiaries of an innovation – which can include unforeseen ones. However, the potential for coalitions can also be 'discovered' as a result of interaction between stakeholders. An interesting example of a coalition-building process is provided by the Zaragoza case study, where the municipality and an environmental NGO teamed up very successfully to push for water saving programmes.

A complementary strategy to coalition-building is to reach out to actors so as to ensure they do not oppose the innovation and obstruct the process. Attention must be given not only to the impact of the innovation itself, but also to the consequences of the implementation process. Whereas in the Aarhus case study there was no real opposition to the plan of uncovering a culverted river, opposition was related to the details of its implementation, related to impacts on e.g. traffic and businesses.



Relational aspects greatly influence policy change trajectories, and in all case-studies the importance of close, long-established personal

relations and trust was emphasised by interviewees.

Example 2: Coalition-building between environmental NGOs and municipality in Zaragoza

Two individuals, one of the NGO ECODES and one of the Municipality, had significant roles in kicking off water savings programmes in Zaragoza. The two actors first aimed to raise citizen awareness on household water use and water saving options. They then aimed to build citizen support for water demand management policies, which in turn put pressure on politicians and strengthened political willingness to invest in water saving technologies and practices. It was considered important to have achievable and measurable targets with high symbolic value for the broad public, such as ‘100,000 commitments’ or the ‘saving 1,000 million litres’. As one interviewee stated, they developed a “*kind of epic, an initial challenge, a collective dream where citizens understand that every individual action has a meaning, a course and a direction*”.

More information can be found at: <http://www.zaragozaconelagua.org/>

3 GOOD PRACTICE 3: ALLOCATING ROLES IS IMPORTANT FOR ARTICULATING ACTORS’ INTERESTS AND RELATIONSHIP TO PROJECT

Success is not only dependent on the innovation ‘fitting’ several agendas, but can also be related to actors feeling some form of ownership of the process – for instance by having influence on its design and implementation.

In the case studies analysed, a lot of consideration was given to how to structure partnerships and allocate roles, and interviewees often highlighted the importance of this point for success. There was a clear division of tasks, responsibilities and expertise between actors. In the case of Lake Phoenix for example, an independent organisation was in charge of project management and established

exclusively for this purpose. This helped avoid conflict between stakeholders and enhance the neutrality of the project.

A different option taken in Aarhus was the use of a ‘partnering’ form of contract, where roles were allocated clearly but flexibly over time. This was seen as very positive because it enabled common ownership of the project, and not simply a contractor/supplier kind of relationship. It also allowed building capacity in all organisations during the lifetime of the project.

Example 3: Flexible task sharing between Aarhus municipality, Aarhus water, and consultants

In Aarhus, the municipality had a conscious strategy to nurture relations with the selected consultants in order to ensure joint ownership. The collaboration was organised as a partnering contract between the involved public and private organisations with shared responsibility for the process and final results. This allowed a level of flexibility and resulted in a process open for adjustments and changes that was critical for success. Technical management, for example, shifted between organisations during the project. The partnering approach allowed building capacity in all organisations during the lifetime of the project.

More information can be found at: <http://www.prepared-fp7.eu/prepared-arhus-denmark>



4 GOOD PRACTICE 4: GETTING POLITICAL SUPPORT TO PROMOTE IDEAS AND UNLOCK RESOURCES

In the three case studies analysed, political support provided key momentum for the projects. The clearest example of how political support can enable projects is in Aarhus, where a political candidate strongly promoted the idea to restore the river. Although the innovation had already been discussed at the technical level beforehand, it was this capacity to gain broad attention for the topic and create a captivating vision related to the potential to improve the quality of life for the citizen of Aarhus, coupled with a window of opportunity (press coverage of water quality issues in river), which got the initiative started.

The order of factors may also be inverted. The case of Zaragoza is interesting in that political support was only achieved during the course of the project, as a result of targeted communication both to the political level and to the broad public. The local environmental and civil rights agenda met a regional political agenda, as the topic of water saving gained prominence in debates of regional autonomy against the national level.

5 GOOD PRACTICE 5: COMMUNICATING INTERNALLY AND EXTERNALLY TO BUILD CAPITAL AND LEGITIMACY

Communication and dialogue processes were seen as key success factors by interviewees. They help build cultural and social capital and legitimacy, particularly in those cases where public or stakeholder opposition could have created significant resistance to innovation. They also allow for actors to get to know each other and for relationship building, which are key for aligning perspectives and identifying

options for win-win solutions. In Aarhus, communication played a role not only before innovation implementation, but also after it had been completed. Partners ensured that instance through guided tours and concerts in newly built (but not yet functioning) wastewater retention tanks.

Example 4: Multiple communication channels in Zaragoza

Innovation uptake in Zaragoza relied heavily on an effective communication campaign over several years organised through the Water Saving City Programme. The Programme started in 1997 with an awareness-raising campaign targeted to households, scaled up in 2000 to other sectors, such as public buildings, parks and gardens, industries and the service sector. Good practices were identified and disseminated, and more than 10,000 pocket guides were distributed among the city's major water consuming sectors. Between 2006 and 2008, the *Zaragoza water saving city: 100,000 commitments* intended to sign more than 25,000 entities, institutions or citizens in adopting at least 4 certified actions on water use. Zaragoza hosted the International Exhibition *Water and Sustainable Development* in 2008 with 200 lectures and educational events. The municipality has also developed a self-explaining water bill in order to make the invoicing more transparent.

More information can be found at: <http://www.zaragozacnelagua.org/>



6 FOR MORE INFORMATION

These recommendations were developed as part of DESSIN, and are based on literature research and analysis of recent cases which have witnessed successful innovation uptake in their urban water management: Aarhus in Denmark, the Emscher catchment in Germany, and Zaragoza in Spain.

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Another brief was prepared targeted to water managers and policy makers. Please visit the FP7 DESSIN project website: <https://dessin-project.eu>.

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