

## **BETWEEN MARKETING AND FINANCIAL SUPPORT: DUTCH MUNICIPAL POLICY INSTRUMENTS TO IMPROVE THE QUALITY OF PRIVATE HOUSING STOCK**

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### **Abstract**

*Dutch municipalities are faced with an ageing private housing stock, of which parts show a diversity of quality backlogs, including their energy quality. Dutch municipalities are in the process of developing a combination of communicative and economic policy instruments to seduce private homeowners to invest in their dwellings' quality. Homeowners' willingness and capability to invest, and their level of organization play key roles here. This paper investigates, if the applied policy instruments to improve the quality of private housing stock in three Dutch municipalities are effective as well as cost-effective for both municipal governments and private homeowners. First results indicate that municipalities are marketing quality improvements to private homeowners by organizations that support and communicate with homeowners, but yet it seems without the hoped-for large-scale improvements. A multi-level policy approach seems to be needed for private dwelling improvement to become successful. This implies an improved playing field shaped by the national government, in which municipalities can make use of their local long-term oriented economic policy instruments more efficiently, such as property taxes and rebates on such taxes for (e.g. energy) quality improvements.*

**Keywords:** Dutch municipal policy instruments; quality improvement of private housing stock.

### **INTRODUCTION**

In 2008, the Dutch housing stock consisted of around 7 million dwellings (CBS, 2011). More than two-thirds (68%) of the Dutch housing stock is privately owned, and almost one-third is owned by housing associations (ABF Research - SysWov, 2010): the owner-occupied share is 57,2%, whereas the private rental share is 10,8%. The social rental share is even diminishing due social rented property, which is sold-off by housing associations. The percentage of owner-occupied housing in the Netherlands and other European countries is growing, as a result of European policies stimulating homeownership.

The private Dutch housing stock is aging and problem parts can be found in the pre-war owner-occupied single family houses, in pre-war private-rented single family houses and in pre-war and early post-war private rented and owner occupied multiple-family dwellings (Meijer and Thomsen, 2006). In addition, there is a large energy saving potential in private housing stock, especially in dwellings built before 1985, where this potential is the largest (Menkveld et al., 2005). Apart from many other factors, such as the spatial quality of a location, housing quality seems to be dependent on the kind of tenure (cf. Visscher and Meijer, 2008; Meijer and Thomsen, 2006).

The national 'Qualitative Housing Survey' KWR (Kwalitatieve Woning Registratie) was a large-scale periodical survey on the 'overall' quality (including its building-, energy- and housing-technical quality) of the Dutch housing stock and its living environments. A diversity of KWR measurements indicated, the quality of this stock has strongly improved since 1990, especially in the pre-war part of the housing stock and in particular in private (and social) rental dwellings (cf. Companen, 2007). The KWR survey was succeeded by the national WoON (WoonOnderzoek Nederland), which until so far, and in terms of quality, has mainly measured the energy performance levels of dwellings in WoON Energie 2006 and WoON Energie 2009.

In the Netherlands, 'More with less' (Meer met minder), the national energy saving plan (2007) and covenant (2008) for the existing building stock were introduced. The plan aims to build up a 'structural market for energy saving' by removing investment- and other barriers for owner-occupiers, private landlords, and others (cf. Tambach et al., 2010). Lessons learned from pilots, workshops, experience and key- and expert-interviews have resulted in a More with less report on approaches, likely to be successful for building-related energy saving in the existing housing stock (Boerbooms et al., 2010). Hypotheses are founded on findings in literature on behavioural economics, focusing on people and their decisions being sensitive to irrational influences of their direct environment, their emotions and short-sightedness (ibid., p.16).

#### *The Dutch municipal government as problem owner*

Enforcement possibilities and sanctions (fines) as integrative part of Dutch energy certification regulation are still missing, the current Dutch Building Decree (2003) does not contain a minimum energy performance standard for existing dwellings, and Dutch dwellings are mostly no municipal property (cf. Tambach et al., 2010; Tambach, 2009). This playing field makes it difficult for municipal authorities to improve the energy performance of housing stock, also with regard to international agreements, such as the Kyoto Protocol (1997), entering into force on 16 February 2005, setting binding targets for 37 industrialized countries and the European community for reducing greenhouse gas (GHG) emissions. In addition, municipalities are faced with a decline in the social and economical value and the liveability of neighbourhoods, where maintenance backlogs of private homes become visible.

Despite the fact that a rising number of municipalities is formulating high-ambitions local climate policies (Tambach, 2009), the improvement of private housing stock is seldom to be found on the municipal political agenda due to missing insight into this stock's quality (Goudriaan and Ten Napel, 2004).

In this research, and with regard to the above playing field, the Dutch municipal government, is regarded as 'problem owner', trying to realize quality improvements in an aging private housing stock. In-depth insight of Dutch municipalities in the local housing stock's overall

condition is diminishing and is limited to ad-hoc quality registrations in (long-term) maintenance reports, and in reports, giving tailored advice on energy saving measures for a certain property ('Maatwerkadviezen Energiebesparing'). An Energy Performance Certificate (EPC) is also included in such a tailored energy-saving retrofit report (abbreviated as tailored retrofit report or advice, hereafter). An EPC is related to Directive 2002/91/EC, also known as the Energy Performance of Buildings Directive (EPBD, 2003), which intends to promote the improvement of the energy performance of buildings within the European Community.

The signatory parties of the Climate Agreement, the VNG (the Association of Dutch Municipalities) and several ministries (VNG et al., 2007), promote that the national government and municipalities realise considerable energy saving in the built environment. One of the ambitions is a reduction of dwelling's and building's energy consumption with more than 50% by 2020 (paragraph 6, article 10/1.). Signatory parties also agreed to promote, in dialogue with More with less programme parties, that municipalities actively contribute to the execution of the programme by the organization of 'target-group-oriented' (cf. Gladwell, 2002; Godin, 2002 and Ariely, 2009) communication and information campaigns, and other local stimulus to organize 'to let private owners and companies take energy saving measures for their property'.

#### *Homeowners' barriers to dwelling improvement*

Homeowners are responsible for the maintenance of their dwellings and Dutch owner-occupiers generally make more investments in the maintenance of their dwellings than any other owner category. Despite this fact, there remain financial, organizational and other constraints to work away maintenance backlogs, also encountered in private rental and owner-occupied, pre-war and early post-war apartments, mainly situated in (greater) urban areas, combined with mostly individually sold off flats (Meijer and Thomsen; 2006).

#### *Case study research*

This case study research makes part of a PhD project, focusing on municipal policy instruments for quality improvement of private housing stock, conducted in the framework of the research project 'Quality impulse for private housing stock' (see acknowledgements). The research question of this paper is:

Have the municipal policy instruments that were applied in three different urban areas (cases) been effective and cost-effective for both the municipal government and homeowners to improve the quality of private housing stock?

This case study research included literature and documentary studies, and interviews with municipal officials, aldermen, management board members of homeowners' associations (HOAs), owner-occupiers and private landlords. The cases were selected according to the severeness of quality backlogs of private dwellings in three urban areas (neighbourhoods or districts) and case studies were conducted and analysed by making use of literature on policy instruments, behavioural economics and marketing.

First, the role, policy and instruments of the Dutch municipal government are described. Second, municipal policy approaches and instruments in three of seven conducted case studies will be elaborated in this paper as well as the effectiveness and cost-effectiveness of the instruments. Third, the findings will be discussed. Fourth, brief conclusions will be drawn from this case study research.

## **THE DUTCH MUNICIPAL GOVERNMENT**

The Dutch national Housing Act (1901), revised in 1991 and 2007, refers to the national Building Decree (2003) which contains technical building regulations for both new and existing buildings and for various building functions. It also includes minimum requirements in the areas of safety, health, usability, energy efficiency and the environment. Based upon the Housing Act, Dutch municipal authorities have to inspect the quality of the housing stock, which must not decrease below the minimum level according to quality requirements for existing dwellings of the Building Decree.

In the first Dutch National Environmental Policy Plan (NEPP, 1989) and first white paper on energy saving (1990), municipalities were given a role as co-executor of energy policy, linked to sustainable development. Dutch municipal authorities are the tier of government, which stands closest to the citizen. They possess an important informative role to point out the EPC to citizens (Agentschap NL, 2010). They can advise house-buyers to ask for an EPC to gain insight in a dwelling's energy quality or advise homeowners to think about energy efficiency measures at the moment of dwelling improvement and guide them to a diversity of subsidy options, for example the national subsidy for a tailored retrofit advice ('Subsidie Maatwerkadvies Energiebesparing'), which ran from 1 July 2009 till the budget stopped at the end of 2010.

Local authorities in the Netherlands have relatively limited own tax revenues and depend largely on the national government for their resources: about half of this national funding takes the form of a specific transfer, or ear-marked funding - the rest is in the form of a Municipal Fund (an open-budget system with a budget ceiling, with its distribution depending on criteria like the number of inhabitants) (Coenen and Menkveld, 2002). But compared to other European countries like Sweden, Belgium and the United Kingdom, the Netherlands has the lowest revenues from own local taxes (cf. Koopmans et al., 2005). For Dutch municipalities, OZB ('onroerendezaakbelasting') property taxes are an important revenue source, and they gain more than 90% of their fiscal revenues from OZB taxes (ibid.).

### **Municipal policies and instruments**

Municipal authorities can force, seduce and/or persuade homeowners to improve the quality of their dwelling by sticks, carrots and/or sermons (Thomsen and Van der Flier, 2008; Bemelmans-Videc et al., 2003). This research distinguishes three types of policy instruments, municipal authorities can make use of, based on a distinction by Itard and Meijer (2008), Üрге-Vorsatz et al., (2007), and Derksen and Schaap (2007), which are: (1) Regulatory instruments, (2) Economic instruments, and (3) Communicative instruments.

For private dwelling improvement, local authorities often combine 'carrots', such as subsidies and preferential loans with 'sermons' by communication bodies, functioning as a medium and 'extension' (cf McLuhan, 1997) of the municipality towards homeowners. Force is applied to enforce the law or protect public interest, common good, civil right or basic private concern (Thomsen and Van der Flier, 2008). Regarding property rights, owners cannot easily be forced to serve public interests or suit governmental policies (ibid.). Thomsen and Van der Flier (2008) state that in today's western democracies, a shift from public force to civil responsibility can be noticed, and force (the stick) only to be applied if other measures fail (ibid.). Therefore, this research focuses on economic and communicative policy instruments, which are also applied in the cases.

## **Economic instruments**

Seduction (the carrot) is an important but often expensive measure (Thomsen and Van der Flier, 2008; Bemelmans-Videc et al., 2003). Examples are subsidies, low-interest loans, fiscal instruments, market-based instruments such as energy performance contracting, typically by an ESCO etc. (Ürge-Vorsatz et al., 2007).

Economic instruments providing incentives for energy efficiency improvements are needed to promote energy efficiency through market-led measures and price signals: subsidies or preferential loans could be combined with EPCs (Klinkenberg and Sunikka, 2006). The improvement by one or two certificate levels could be a prerequisite for a financial incentive (ibid.). To be effective, the municipal government binds obligatory requirements for homeowners to carrots, such as organisational and/or managerial criteria to homeowners' associations (HOAs) etc. (cf. Tambach, 2009).

### *Subsidies and low-interest loans*

Subsidies are applied to trigger investments in private dwelling improvement. In the past years, municipal governments applied subsidies for dwelling improvement, but without a long-term effect on the prolonging of dwellings' life span in terms of maintaining and safeguarding dwellings' quality (cf. Tambach, 2009).

For urban regeneration projects, local authorities can work together with SVn (stichting Stimuleringsfonds Volkshuisvesting Nederlandse Gemeenten), a corporation, functioning as incentive fund for municipalities. As low interest loans are seen as subsidy in Dutch jurisdiction, local authorities have to formulate 'low-interest-loan-regulation'.

Local authorities pay an amount of money in a revolving fund, which is managed by SVn. From this fund, they are able to provide low-interest (also called 'preferential') loans to support homeowners in financing home-improvements. Homeowners can spread repayment costs over a period of around 20 years (loan term) to have a relatively low increase in housing costs.

SVn controls homeowners on their ability to pay the improvements on credit, and advises municipalities upon this matter. In addition, some municipalities actively conduct first checks. By lending money for interest rates, (in average four percentage points) lower than market rates, municipalities lose interest and by issuing loans, they participate as a kind of societal entrepreneur emphatic in risk bearing investments (see also KEI, 2007).

### *Fiscal incentives*

The use of subsidies grew fast in the sixties and seventies of the last century but was cut back in the last decades because of rising costs and political changes (Thomsen and Van der Flier, 2008). Over the last years, fiscal incentives are gaining attention as being less expensive and more effective (ibid.; Sunikka 2006).

The Organisation for Economic Co-Operation and Development (OECD, 2006) concluded that environmental taxes contribute effectively to environmental policy. The CPB Netherlands Bureau for Economic Policy Analysis and Ecofys also concluded that the energy tax contributes effectively to environmental policy, and without these taxes, the energy use would have been twice as large in Europe. The Netherlands is a leading European country with regard to the share of green taxes in the total amount of national tax revenues: revenues from green taxes increased from van € 6 milliard in 1990 to € 20 milliard in 2008, and make up 14% of the total share of the Dutch tax incomes since 1995 (Ter Haar, 2009). Calculations by CE, an independent research and consultancy organization, specialised in the development of innovative solutions to environmental problems, show that tax-increases on petrol, diesel and LPG are effective instruments to lower CO<sub>2</sub>-emissions in traffic (ibid.).

Fiscal rewards or tax rebates for energy efficiency investments, combined with fiscal penalties for maintaining unsustainable situations could be an essential instrument to influence dwelling owners. Not only on national scale, but also on local scale as OZB tax relief for homeowners applying energy efficiency measures (Tambach and Meijer, 2009). Municipalities can levy OZB tax from owners and tenants of real estate (but not from tenants that rent a house). The basis for levying is the value in the economic market, which is determined by surveyors on the basis of the 'Wet Waardering Onroerende Zaken' (WOZ) - the 'Immovable Property Tax Act'- and every municipality determines OZB tax heights themselves. The Dutch national government (for the notional rental value for owners-occupiers and the income tax) and the district water boards ('waterschappen') make use of the WOZ value to determine their taxes, too (Koopmans et al., 2005).

Households and other minor consumers, pay much more per ton CO<sub>2</sub> than consumers in any other sector (major consumers make part of the emission-trading-system) (cf. Ter Haar, 2009). In addition, the current OZB-system does not reward owner-occupiers for their investments in energy efficiency measures – on the contrary: the more they invest in such measures, the higher the OZB-tax. This is in conflict with the many local climate policy aims to lower housing costs for citizens by the promotion of energy saving measures. So why not reward owner-occupiers for investments in energy efficiency measures for their homes?

Apart from this, and according to Ariely (2009), the incentive of offering s.th. 'for free' (e.g. a tailored retrofit advice) is a source of emotional and irrational excitement. Starting an action by offering s.th. for free seems to be effective (Clean Energy Group and Smart Power, 2009) and more effective than with a rebate (Boerbooms et al., 2010).

### **Communicative instruments**

Communicative instruments play an important instrument for knowledge transfer by local authorities. For example municipalities need to communicate information on a dwelling's quality well to home-buyers, and communicate economic instruments well to homeowners. Other examples are (environmental) education, support, organization and voluntary action etc. (cf. Üрге-Vorsatz et al., 2007).

Where other policy instruments fail, persuasion - the sermon - (Bemelmans-Videc et al., 2003) can be an indispensable instrument for municipalities to influence civil behaviour, particularly with regard to sustainability. Examples in this sense can be appealing for sense of responsibility and/or self-interest, like owners' responsibility for the environment and climate change and the sustainability of interventions (cf. Thomsen and Van der Flier, 2008).

The EPC does not seem to be of decisive economical value in especially the private housing market yet (Tambach et al., 2010). In this respect, persuasion by the local and/or national government can be supportive in persuading homeowners, –buyers and brokers to understand the value of an EPC - and of energy saving measures that follow from it - for their home, translated most commonly not only in a lower energy bill but also in more comfort.

According to Godin (2002), the old marketing rules such as advertisements don't work so well anymore, because people aren't likely to have easily solved problems, consumers are hard to reach, and satisfied consumers are less likely to tell their friends. In addition, he stresses to differentiate customers, to find the group that's most profitable and the group that's most likely to sneeze, and to ignore the rest.

## CASESTUDIES IN THREE MUNICIPALITIES

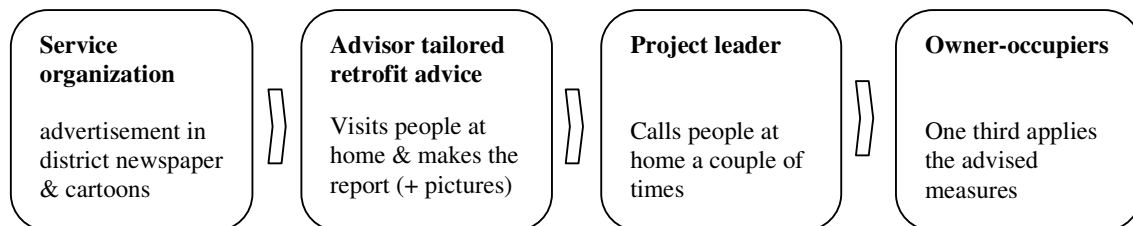
### The Hague: case in Rustenburg-Oostbroek (district)

#### *Policy approach and instruments*

Rustenburg-Oostbroek is a district of The Hague with a weak position in the housing market, and dwellings with energy efficiency deficits. With this pilot, the municipality intends to develop a marketing strategy to market energy efficiency measures via a tailored retrofit advice for homeowners. A service organisation, named 'Serviceorganisatie Rustenburg-Oostbroek' supports homeowners with all aspects, entailing dwelling improvement. It developed three instruments in cooperation with the municipality, which are:

- A free tailored retrofit advice and/or extra subsidy upon investment costs, after application of all other available subsidies applied for seven staircase entrance flats, selected out of thirteen due to subsidy limits. EPCs show one E-, 5F- and 3G-labels with an average energy performance, indicated by an Energie-Index (EI) of 2.67 (F-label).
- A free tailored retrofit advice at the moment of designing a roof superstructure was applied for six selected owner-occupiers.
- A free 'Groen-MOP' (long-range maintenance plan including energy-saving measures) for large (and combined) HOAs. The service organisation selected one large HOA, combined by six smaller HOAs for experimenting with a Groen MOP.

A personal approach of and communication with owner-occupiers by the advisor at the moment of conducting a tailored advice at people's home, and of the project leader is applied. The steps, followed to seduce owner-occupiers to finance in and take energy efficiency measures are depicted in Figure 1.



**Figure 1:** Marketing strategy followed by the service organisation and the advisor.

#### *Effectiveness and cost-effectiveness*

Thirteen owner-occupiers reacted on the advertisement in the district-newspaper to obtain a free tailored retrofit advice and extra subsidy for energy efficiency investments. Three of in total nine owner-occupiers finally applied the energy efficiency measures, advised by the tailored retrofit report. Half of six selected owner-occupiers, engaged in drawing up a design for a superstructure, integrated double glazing in the tender for the (isolated) superstructure (Serviceorganisatie, 2010).

The service organisation's subsidy did not make part of the tailored reports, the reaction and application time for subsidy was short and taking at least two measures in one time may have been too high a barrier for the owners. The application of renewable energy technologies using solar energy was stimulated neither by the subsidy nor explicitly by the reports: only two of nine reports promoted a solar boiler, respectively solar panels. The municipal government had no costs for both the pilot project and subsidy, granted by the service organisation. The costs of € 47.860 for the pilot project were covered by a national IPSV

(‘Innovatie Programma Stedelijke Vernieuwing’) grant for innovative urban regeneration projects (Municipality of The Hague, 2010). The highest costs consist of personnel, project costs and the organization of the service organisation, followed by direct subsidies: intensive support of homeowners is both labour-intensive and expensive to make subsidy-regulation become successful.

### **Dordrecht: case in the Dichterskwartier (neighbourhood)**

#### *Policy approach and instruments*

The Dichterskwartier is a neighbourhood with a weak housing market position, with dwellings suffering from maintenance and foundation backlogs, and energy efficiency deficits. The municipality started with gaining a social basis for neighbourhood regeneration plans by formulating a common approach with the residents. The approach entails three steps (Municipality of Dordrecht, 2010a):

1. Making homeowners aware of their own responsibility for their dwelling’s quality,
2. Strengthening their organizational capacity, and
3. Realizing their investment capacity.

To support homeowners with dwelling improvement, the municipality has contracted ‘Bouwadviesbureau De Groene Werf (dGW)’, which has developed three ‘improvement packages’ with homeowners, taking a central place in the approach as they are seen as principals by the municipality. The lengthening of the dwelling’s lifespan by 25 years by regular maintenance, made part of the municipal contracting criteria. Packages can be combined, but the intention is that the package for improving the energy quality must be combined with the package for working away construction backlogs and for major maintenance (Municipality of Dordrecht, 2010b). In addition a free report on necessary home-maintenance is provided to homeowners, and the municipality will offer a 2% interest loan (height and term package-dependent) (Municipality of Dordrecht, 2011).

#### *Effectiveness and cost-effectiveness*

The municipality expects, 75% of 141 property owners will be willing and considered for a subsidy and preferential loan. 40 to 50 homeowners, who are supported by dGW have indicated they are willing to think about dwelling improvement. Owner-occupiers are interested in a free maintenance report, and a few have started to ask for offers of contractors. However, barriers can be found in the time the municipality needs to prepare and decide on a (temporary) subsidy- and preferential-loan-regulation, intended to run till 2015 or till the subsidy ceiling is reached. A bottleneck to the project is the ending of the national subsidy for a tailored retrofit advice, and an uptake of measures on the level of an entire housing complex.

The breakdown of municipal costs for dwelling improvement (€ 2.4 million in total) (Municipality of Dordrecht, 2010a) is as follows:

- |   |       |
|---|-------|
| • Payment SVn for preferential loan                 | 44,6% |
| • Subsidies for improvement packages                | 30,6% |
| • Process costs                                     | 21,0% |
| • Municipal assessment of subsidy and loan requests | 3,8%  |

Municipal costs are covered by € 1,5 million of so-called municipal strategic investments, € 0,9 million by an impulse regulation based upon the ‘Besluit Impulsbudget Stedelijke Vernieuwing 2008-2009’ (ibid.). But there also seem to be certain risks, for example a worsening of the foundation condition of the dwellings.



## **Schiedam: case in the Newtonbuurt (neighbourhood)**

### *Policy approach and instruments*

The Newtonbuurt is a neighbourhood with a weak housing market position, with dwellings having mainly maintenance backlogs, energy efficiency deficits and some houses with foundation problems. The policy approach is based on total control of the execution of stimulated improvement measures to work away maintenance backlogs and by oral communication with homeowners. The improvement by taking energy efficiency measures is now explicitly integrated in this approach.

An interview with a civil servant, working on private dwelling improvement, delivered the following municipal approach: First, agreements on execution times with homeowners are written down in notes and letters. Second, owners are controlled by home-visits, oral communication and making new agreements - if necessary. Third, and if the first two steps haven't been effective, owners receive letters, home-visits and oral communication. The fourth step, which needs to be avoided, is enforcement, but also here, oral communication and a personal approach is intensively applied.

Other instruments applied are a free technical report of the dwellings for homeowners, a free tailored retrofit report, and free advice and support by the 'Servicepunt Woningverbetering'. In addition, homeowners can request one preferential loan (with an interest rebate of 5% and a minimum interest rate of 1,5%, but with different loan heights and terms) for financing the working away of maintenance backlogs, to improve the dwelling's foundation and energy efficiency. The municipality cooperates with the national government and with local brokers to finance the free tailored advice.

### *Effectiveness and cost-effectiveness*

The effects if this case cannot be measured yet, but they can be compared to the approach, which will also be followed for the Newtonbuurt: Since the start of the municipal private dwelling improvement project in 2005, 1.400 low-interest loans stemming from a revolving fund have been honoured by the municipality. In 2.800 first-phase-dwellings, maintenance backlogs have been worked away, and one on three to four dwellings have been improved with a low-interest loan, with an average investment of € 17.000.

Despite high municipal investment in preferential loans by 2014 (the end of the dwelling improvement project), municipal costs seem to be limited to the interest lost and management costs for the revolving fund at SVn. The municipality obtained national grants to solve 'bottlenecks' in urban regeneration projects (from the 'Knelpuntenpot ISV'): one grant for excessive foundation problems and another grant for higher-than-normal maintenance backlogs stadsvernieuwing, including costs for supporting homeowners.

## **DISCUSSION**

The level of participation in the subsidy schemes by owner-occupiers, as the case studies demonstrate is low. It requires an intensive communication by service organisations to become successful. This is labour-intensive and costly. A low cost-effectiveness of capital subsidies was also reported by Ürge-Vorsatz et al. (2007) in relation to CO<sub>2</sub> reduction. In comparison to preferential loans stemming from revolving funds, the investment level by owner-occupiers by a subsidy is relatively low.

The case study in The Hague indicates that by applying a personal approach and by oral communication by the advisor, who spent two up to three hours at people's homes (and by the project leader that calls them hereafter) seems more effective than the written communication via the district newspaper, a more distanced and 'cold medium' (McLuhan, 1997). This is illustrated by the thirteen reactions on the newspaper-advertisement, which also show, the old marketing rules don't work so well anymore (cf. Godin, 2002). The case also indicates that applying a personal approach at the moment of designing a roof superstructure seems more effective than at a random moment by advertisement.

However, for financing the stimulation of private dwelling improvement, the municipality is largely dependent on the national government. Offering a 'free' tailored retrofit advice for homeowners was made possible in the cases in The Hague and Schiedam on the basis of the temporary national subsidy regulation, which has now stopped. Municipal subsidy regulations or agreements with brokers, building upon this national subsidy tool, are now in danger to abruptly break down – and with it the local market for energy-saving measures.

In Germany, investors in energy efficient renovations and -measures for owner-occupied or rented housing stock are supported by the 'Energieeffizient Sanieren' incentive programme of the KfW Bankengruppe, a promotional bank under the ownership of the Federal Republic and the 'Länder' (federal estates) by preferential loans and investment subsidies. This and earlier programmes can be seen as successful in terms of CO<sub>2</sub> reduction, job-creation and continuity (cf. Clausnitzer et al., 2010). Whereas such loans could be regarded as a hidden subsidy with a risk for free-riders, in the KfW programme owners and buyers have to prove, subsidies are only spent for the purpose of energy efficient renovation or -measures, and that such renovations, meeting EnEV-standards, are executed by specialists (Tambach et al, 2010).

By an OZB-exemption or WOZ-tax rebate (or tariff differentiation), energy efficiency investments in dwellings could be stimulated (cf. Schillemans and Blom, 2006). The current Municipal Act ('Gemeentewet') neither offers possibilities for municipalities to differentiate OZB tariffs on the basis of a dwelling's energy consumption, nor does it include an OZB tax rebate on the basis of a dwelling's energy performance as lawful exemption (ibid.). It seems that to improve these possibilities, an adjustment of the WOZ Act or Municipal Act would be necessary.

## **CONCLUSIONS**

First results indicate, municipalities are investing in costly support-and-communication-trajectories, in marketing quality improvements and providing financial support to homeowners, but yet it seems without the hoped-for large-scale improvements. Local authorities could act more effectively, if the national (and European) policy framework conditions were set properly (cf. Collier, 1997).

Notwithstanding, organizations that support and communicate with owners may have a positive effect on investment decisions on quality improvements of private homeowners. A personal approach and oral communication seems to come to the benefit of the effectiveness of policy measures like a tailored retrofit report and to urging homeowners to execute improvement measures. As oral and written cultures alternate, we can conclude to be living in a 'new oral culture' (McLuhan, 1997). The case studies indicate, good and clear oral

communication, but also control on the application of improvement measures is a prerequisite to the success of a subsidy or preferential loan regulation.

In conclusion, it seems that marketing strategies and financial support cannot be regarded as a panacea to overcome legislative hiatuses, described in the introduction. Nevertheless, chances for municipal governments to improve the quality assurance of blocks of flats lie for example in the attachment of legally binding quality criteria to division permits for such property into apartment rights, and to the sale of such rights.

More long-term oriented financing instruments are needed to support private dwelling improvement and build up a structural local market for dwelling improvement (cf. Tambach et al., 2010), for example by property (WOZ-) tax rebates. It may also be more effective, if the national government could set up a national revolving fund to support municipalities in providing low-interest loans for home-improvement on a more permanent base, and also to spread risks.

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