Taking It EASY in the Netherlands: Refocusing Energy Efficiency Policy for Domestic Appliances

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ABSTRACT

A rethinking of the Netherlands energy efficiency policy for domestic appliances has resulted in new evidence for the old idea that a well-organized market leads to the highest efficiencies. Started in 2000 and utilizing a marketing incentive, the Energy Premium Scheme (EPR) for (EU) A-labeled appliances resulted in a massive increase in market introduction of energy efficient products. These programs now account for the remarkable result that more than 75% of new appliances sold in the Netherlands are A-labeled for most products, compared to EU-averages of below 25%.

This success pointed to the necessity of redeveloping the EPR to create new incentives for sales of better than A-labeled appliances. Project EASY was implemented as the carrier for this redevelopment process. The starting point for EASY was the question of whether the effectiveness of existing policy could be improved by the introduction of an endorsement label for high efficiency products coupled with a tax rebate for this new label. As part of EASY, an analysis of the Dutch market, extensive market consultations, consultations of the governments of neighboring countries, and a legal analysis provided input to the drafting of a new policy proposal. A targeted project design, based on the Strategic Choice methodology, allowed for the continuous re-adjustment of all project components as new information became available.

The outcome of this project was an elaborated proposal for upgrading the EPR combined with a new, national endorsement label. This proposal is accompanied by an implementation plan including a transitional period, during which some parts of the policy can be implemented, whilst parts awaiting European Union approval can be further developed. Conclusions and recommendations for future policy development projects conclude the presentation of EASY.

Introducing EASY, a Policy Project

The Netherlands has a long history of involvement in improving appliance energy efficiency as a means of energy conservation and CO_2-emission reduction, dating back to the 1980s. Dutch energy efficiency policy has been subjected to many modifications over the years due to evolving market conditions and other developments, like the changed business structure of the energy industry. The recent market change in response to government policy, with A-labeled products becoming the most common product, made it necessary to evaluate this policy once again.

The Dutch Ministry of Economic Affairs, in charge of national appliance policy, decided to set up a project to develop a new strategy for an appliance energy efficiency

policy. This project was named EASY, as it set out to develop and assess a new *E*nergy-efficient *A*ppliances *S*trateg*Y*.[1]

This paper describes the structure and results of EASY, a project executed from December 2001 to March 2002 to refocus energy efficiency policy for domestic appliances in the Netherlands. First, a background overview of Dutch policy is presented, followed by a summary of the project design. The authors will subsequently present the results of the project, its multiple components, and the strategy for implementation. The paper concludes with an analytical discussion of the overall design and results, and provides recommendations for future policy development projects.

A Brief History of Appliance Policy in the Netherlands

Promotion of efficient installed appliances started in the late 1980s, initially endorsing the development and marketing of condensing gas boilers and later of higher efficiency gas water heaters.[2] Appliance energy labeling started in 1992 with the introduction of the European Union energy label[3]. The utility environmental action plan, introduced in 1990, included efficient appliance subsidies. This led to an increase of the market share of energy efficient appliances and major CO_2-emission reductions, firstly from installed appliances and, since the late 1990s, other products (mainly white goods).

Energy tax and tax rebates. In 1997, the Netherlands introduced an energy tax for households and small businesses; this tax puts a price on the resulting CO_2-emissions of energy end-use to serve as a stimulus for energy efficiency. The energy tax has been increased since 1997 and is now approximately € 0,07 / kWh (USD 0,06 / kWh)[4] (for electricity), which equates to a 50% increase in end-user energy price.[5]

The energy tax was accompanied by a tax rebate for end-users buying energy efficient appliances (the Energy Premium Scheme, Dutch acronym: EPR), both to stimulate the purchase of energy efficient products and to compensate for increased energy spending. This tax rebate (usually a fixed sum of € 50, USD 44) is given to consumers after they purchase an energy efficient product. The tax rebate applies primarily to white goods and installed appliances. EU energy labeling provides the foundation for the white goods subsidy scheme, and a national energy efficiency label provides – in the absence of an EU energy label - the foundation for the installed appliances scheme.

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[1] The Ministry of Economic Affairs assigned a project team to EASY. This team was supported by Klinckenberg Consultants (strategy & international aspects) and Novem (technology & market aspects). The project started in December 2001 and was concluded in March 2002.

[2] Natural gas is the most common fuel for heating (central heating and water heating) in the Netherlands. The market share of gas for central heating is nearly 100%; for water heating, around 85%.

[3] The EU energy-labeling scheme classifies appliances into one of seven classes, A being the top of the scale, G being the least efficient class. Market average at the time of development of the labeling scheme (1993 / 1995) was a D-rated appliance.

[4] All financial information in this paper is originally in EURO; USD information is an approximation of these original amounts, based on the exchange rates when this paper was written and may not reflect the current situation.

[5] The energy tax on gas results in a 30% increase in end-user price.

The need for EASY, an *E*nergy-efficient *A*ppliances *S*trateg*Y*. The tax rebates on energy efficient white goods and installed appliances has had a significant impact on the appliance market.[6] Efficient white goods, characterized in Europe with an "A" under the EU energy-labeling scheme, were first introduced on the Dutch (and European) market around 1997. Market share of A-rated cold appliances and washing machines has risen from about 15% overall to around 70% for cold appliances and around 90% for washing machines in two years (Vlehan, 2002). The market share of A-rated dishwashers, near zero in late 1999, was above 70% in late 2001, and the market share of condensing boilers was above 80% in late 2001. This all can be seen as a great success of the tax rebates in combination with other policies.

However, further market development towards energy efficient appliances can no longer be achieved with these instruments. A-rated white goods (with the exception of tumble dryers) already are the predominant products on the market and no longer seem to be in need of government endorsement. Higher efficiency products could well be introduced and endorsed but are indistinguishable from the lower efficiency A-rated products. In principle, this issue could be resolved by the updating of EU energy labels. This, however, has shown to be a very long-term process with an unpredictable outcome. However, more efficient products are currently unavailable to end-users, forcing them to spend more on energy than if efficiency developments had kept pace with energy price increases. This has created a need to rethink national policy and develop a new appliance energy efficiency strategy.

Project Design & Execution

The project was initiated by a government department in the typical position of not having access to all the relevant information (most information regarding product and market developments resides with market parties) but still having to develop a well-balanced, effective, and cost-efficient policy. This situation makes a traditional approach (collecting and analyzing information, drawing conclusions and deciding on recommendations, after which the whole is presented to the outside world) unfeasible.

Three-phase project design. The project was designed to include three phases, in which new information is added in each phase of development and the whole of the project is readjusted on the basis of this new knowledge. Phase one of the project consisted of an in-house analysis of the Dutch and other European markets. This yielded a problem definition, criteria to apply for selecting a solution to the problem, and a first overview of preferred solutions. It also led to identifying gaps in the information and an action plan to bridge these gaps.

In phase two, the initial analysis was checked with national and international contacts, and a first legal analysis was prepared. This information led to the addition of new (market-based and legal) criteria and to a re-adjustment of the preferred solution to the problem. It also showed the need for more in-depth market consultations, legal analysis, and consultation with other governments. In phase three, the proposal for new policy was checked with market parties and governments of neighboring countries, and the legal aspects of this proposal were

[6] The reader should bear in mind that energy efficiency developments of installed appliances are also affected by Dutch building codes, which prescribe a minimum energy performance of the whole construction, including heating and water heating installations.

reviewed. This formed the basis for a final policy proposal that was feasible not only from a theoretical viewpoint (as was the proposal drafted in phase one), but also from legal, market party and international viewpoints. The senior management of the Ministry of Economic Affairs has approved this final proposal.

Strategic choice approach. The Methodological basis for this project design was the Strategic Choice methodology. The United Kingdom-based Institute for Operational Research originally developed the Strategic Choice methodology, for spatial planning problems (Hickling, 1975). This methodology approaches a strategic planning process as a cyclic learning process, in which all aspects are re-examined during each phase of the project. The aspects include: Selecting the right problem; Defining the problem; Determining possible solutions; Selecting preferred solutions; Analyzing remaining uncertainties and Choosing a policy. For EASY, a slightly simplified version of this model was applied, to account for limitations in time and resources and because some aspects were predefined by existing policy.

Defining the Policy Issue at Hand

Phase one of this project started with an analysis of the policy issue at hand, leading to a balanced definition of the problem. This analysis was performed on the basis of Market Transformation theory, a well-known concept, described in a variety of publications (Hastie, 2000; Ürge-Vorsatz, 2000). One typical example of the application of this theory to policy development – which inspired this project – is the UK Department of Food, Agriculture and Environment's "Market Transformation Programme" (www.mtprog.com).

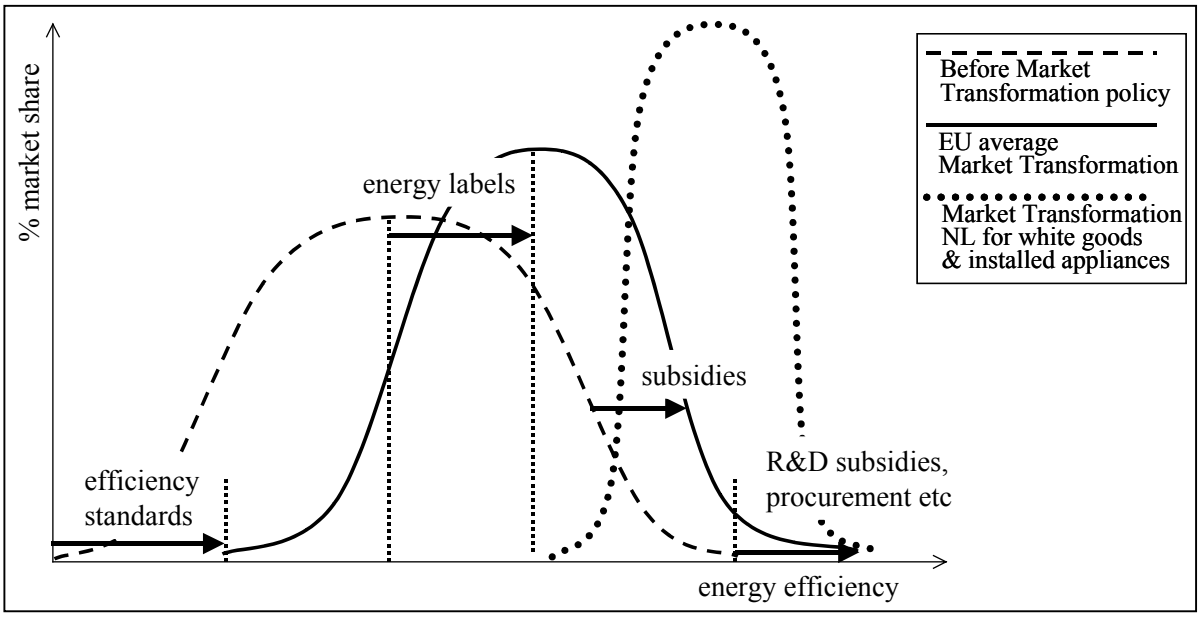
The problem definition that resulted from this analysis formed the basis for further steps in EASY (determining and selecting solutions etc). However, next phases also included a check on the problem definition, to verify if new information would need to be reflected in an adjustment of the problem that needed to be resolved.

Appliance Policy from a Market Transformation Perspective

Market transformation policy for appliances (and other energy consuming products) traditionally consists of an instrument mix of designated policies targeting low, medium, and high-efficiency products. Figure 1 shows some of the important instruments that have been applied in The Netherlands (and Europe) in recent years. European energy efficiency standards have been implemented to create a barrier to entry into the market for low (energy) performing appliances. European Union and national energy labels have been introduced to categorize the medium efficiency part of the market and to identify the top performing appliances. Product subsidies promote the purchase of top performing appliances available on the market, and R&D subsidies and co-operative procurement policies stimulate the introduction of new highly efficient products into the market.

This concept of market transformation was the starting point for a new policy strategy. It was decided, however, that this idea should be applied bearing in mind that the Netherlands has an open market, well integrated with that of neighboring countries and forms just one part of the European Union market. This means that no special products are produced for the Dutch market. However, market shares of efficient (A-label) products differ significantly from other EU countries.

Figure 1. The Effects of Market Transformation Policy Instruments on Market Shares of Efficient Products in the European Union and in the Netherlands



The Netherlands' appliance market in a European context. The appliance market in the Netherlands is, to a large extent, comparable to those of other European Union countries. There are, however, some distinct differences when looking at this market from an energy efficiency perspective, especially for white goods and installed appliances. Although the products marketed in the Netherlands are similar to those marketed in other EU member countries, the market share of the most efficient products is significantly higher in the Netherlands (CECED, 2001). Figure 1 shows the current market situation for most white goods and installed appliances in the Netherlands relative to the overall EU market and the market before energy efficiency was increased.

It demonstrates that product offerings are nearly completely concentrated on a single energy efficiency point, well above the EU average. This is a desired situation, and a success of the Dutch policy in recent years. However, the graph also indicates that most existing policy instruments are no longer effective regarding market developments in the Netherlands. This is due to the European Union origin of the policy, limitations of the labeling scheme, and the progress that the Dutch market has made in recent years. The market is slow in providing more energy efficient products to end-users that would enable them to adequately respond to increasing energy prices.

Comparing the Netherlands with neighboring countries. Energy efficiency developments in the Netherlands have resulted in a market situation that is quite different from the European average for white goods and installed appliances. However, this is true for some other countries as well (CECED, 2001); in Germany and Belgium, markets have developed with a relatively high share of A-rated, high efficiency white goods.[7] Some markets possess other similarities; it is, for example, believed that consumer preferences for white goods are

[7] With the notable exception of A-rated tumble dryers (which require an expensive switch to heat pump technology) that have a minimal market share throughout Europe.

rather similar in the Netherlands and Germany and that product developments in consumer electronics and IT equipment are similar between the United Kingdom and the Netherlands.

These similarities were further analyzed, applying a breakdown of the appliance market into four product groups: white goods, installed appliances, consumer electronics and IT equipment, and lighting equipment.8 Analyzed issues included: average energy efficiency on the market, manufacturer characteristics, retail characteristics, and new high efficiency products available on the market.

The similarities found with this analysis have formed the basis for further discussions with neighboring countries and the European Commission. It thereby contributed to one of the assumptions that are at the heart of EASY: There is greater potential for market transformation towards energy efficiency in all of the EU if the markets of neighboring countries move in pace with the Dutch market.

The EASY Challenge

The project's goal was to deliver a new strategy for appliance energy efficiency policy that would improve the efficiency of tax rebates and improve market transformation. The new policy should stimulate appliance manufacturers and importers to introduce new, high efficiency products into the Dutch market. The analysis of Dutch market characteristics and the comparison with other European countries have provided input for a new policy proposal. The market analysis led to the conclusion that the combination of an energy efficiency label (EU and national) and product endorsement (tax rebates) has resulted in a significant market shift in recent years.

However, it also indicated that this market change will only continue if both the energy efficiency labeling and the rebate scheme can effectively promote a higher efficiency level. Since the (harmonized) EU energy labeling tends to evolve very slowly (only one updated energy label is expected in the next three years), there is definitely a place for a national alternative endorsement label.[9] Market information and informal discussions with neighboring country representatives and international market party representatives also indicated that national policy could be more effective if it were coordinated with neighboring countries. Especially when defining product endorsement criteria (and label criteria), coordination seems to be essential for effective and enduring market transformation.

New policy for top-level appliances. The Dutch market analysis resulted in a definition of the need for new policy. A new policy should be designed that would lead to the increased introduction of highly efficient products into the market, in cooperation with market parties, and taking into account that the Dutch market is highly integrated with that of neighboring countries. The first phase also led to the conclusion that some important conditions for a new policy exist from legal, financial, and market standpoints, and that these conditions need to be elaborated in the second phase of the project.

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[8] Included are: White goods: refrigerators, freezers, washing machines, tumble dryers, dish washers; Installed appliances: central heating boilers, water heaters, ventilation units; Consumer electronics and IT equipment: televisions, VCRs / DVDs, Set top boxes, Audio equipment, PCs, Monitors, PC Peripherals, Wall packs; Lighting equipment: light bulbs, fittings.

[9] Endorsement labels can take many forms. Examples include the US Energy Star label and the UK Energy Savings Trust endorsement label.

Options for Energy Efficient Appliances Policy

Several options were identified for a new Dutch appliance energy efficiency policy. The two most promising options were a new national endorsement label accompanied by tax rebates and performance agreements with market parties. These two options have formed the starting point for phase two of the project. Two more options, to maintain the current situation and to completely stop endorsing products, have been identified as well, but have not been explicitly tested as it was clear from the beginning that these would not match with the desire to improve Dutch policy.

A new national endorsement label accompanied by tax rebates for products matching the criteria of this label has been proposed as a new strategy for appliance energy efficiency in the Netherlands. As part of this strategy, endorsement criteria should be internationally coordinated, if possible. The combined instrument would apply to all major energy consuming domestic appliances. This proposal was the starting point for the market consultations and legal and international analyses in the third phase of the project.

A second option was the introduction of performance agreements with market parties. This new instrument would result in negotiated agreements with (industry and retail) market parties about the introduction of (a large amount of) new, highly efficient appliances on the Dutch market, for a financial compensation (subsidy). In the second phase, market party, legal, financial and international aspects of these two policy options have been analyzed. A legal and financial analysis and an initial international consultation of performance agreements led to the conclusion that this was not a feasible instrument, as it would not fit with Dutch subsidy criteria, with EU law constraints and would not be an acceptable instrument for other countries. Therefore, the rest of this chapter will focus on the first option, a national endorsement label accompanied by tax rebates.

Market Response to EASY

Dutch market parties were invited to discuss the new appliance policy proposal and indicate their willingness to contribute to this policy. Nearly all market parties accepted the invitation and have given their response to the proposed new policy.

All market parties recognized the need for a new policy, indicating that the existing policy no longer provided enough stimuli for further energy efficiency improvement. All supported a national approach, based on a new national label, instead of continuing support for the EU energy label A-rated appliances that do not represent the top of the market.

Market party representatives indicated the importance of clear messages and predictability in government policy, and the possibility to discuss the consequences of new policy at an early stage. They also verified, as an implicit consensus view, the importance of internationally coordinated measurement standards and product endorsement criteria.

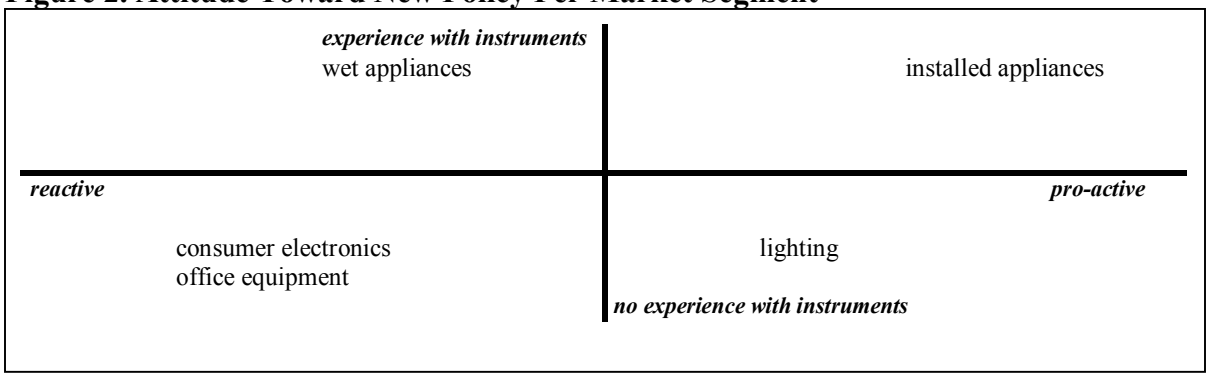
Key factors that determine a positive attitude to new policy. The market consultation revealed the following key factors regarding the attitude of the market parties towards the new policy:

- Experience with the instruments of the new policy; some market actors had ample experience with the rebate scheme or labels, while others did not. Those who had more experience generally had a positive experience.

- A pro-active or reactive attitude towards any policy changes; installed appliances industry market actors were more positive towards policy changes than others, to the point of proposing that new products be included in a labeling scheme.
- The position of the actor in the product chain; sales organizations were more in favor of one national endorsement label for all appliances than were manufacturers. This is explained by retailers acknowledging the positive impact on sales of a higher consumer recognition of a single label when it is used on several product categories, which is not so important to manufacturers (who don't object to several co-existing national endorsement labels).

When combining the first two factors, interesting differences are found between parties in the market segments that were identified in EASY. Figure 2 gives insight into the attitudes in various industries. The more market parties are placed in the right in this figure, the more positive their attitude.

Figure 2. Attitude Toward New Policy Per Market Segment



Legal and Financial Aspects of a New Policy

Legal and financial constraints exist that need to be considered when designing new policy. From a financial viewpoint, the most important aspect is to make sure that the tax rebate is equally available to all consumers. This is considered in the new strategy but will require further attention when implementing the new policy[10]. Furthermore, the new policy will increase the effectiveness of existing tax rebates, resulting in a better spending of government funds.

European law results in longer preparation time. Most legal constraints come from European Union law, which requires that all government policy is in accordance with free trade principles. From a European law perspective, national endorsement labels could form a barrier to trade, as the necessary changes that appliance manufacturers need to implement in order to meet the endorsement criteria might (and probably will) be different for different manufacturers in different countries.

This does not seem to be a fundamental barrier, but might cause delays and adjustments of the endorsement label due to the EU procedures that need to followed when introducing this kind of policy. Tax rebates, to be given to products meeting the endorsement

[10] A full analysis of this issue can only be performed if detailed information regarding endorsed products and rebates is available. This was not the case when this part of the project was concluded.

criteria, also need to be examined under European law. It is expected, however, that these rebates will not contradict European law. In both cases, following European procedures usually takes a relatively long time (up to 18 months) and will likely delay the implementation of the new policy.

International Aspects of Appliance Policy

International coordination of product endorsement criteria is desirable from a government perspective (because it enhances the effectiveness of market transformation policy) and from an industry perspective (because it enlarges the market for high efficiency products).

The Netherlands' neighbors have shown interest in coordinating product endorsement criteria. Converging these criteria would be possible within a short period for some products and might take up to a few years for other products. Nevertheless, the desire to coordinate product endorsement is widely recognized along with the need to send a clear government message to the industry.

Planning convergence in national policies. Discussions with neighboring countries indicated that convergence of product endorsement criteria would most likely be above the A-level for white goods and the level of the Group for Energy Efficient Appliances criteria for consumer electronics and IT equipment. Ad-hoc criteria would be needed for lighting equipment and convergence of criteria for installed appliances seemed unlikely in the short term, due to major differences in national market situation and installation practice.

Outcome: Feasible Solutions to an EASY Problem

Phase two of EASY resulted in an analysis of the feasibility of the identified options for new Dutch appliance policy. Performance agreements turned out to be unfeasible for Dutch policy, as these did not match legal, financial and international criteria.

The proposed combination of a new national endorsement label accompanied by tax rebates for products matching the criteria of this label was identified as a feasible option. It would fit market criteria, provided that the government would give an 'early warning' of changes in such a scheme. It would fit legal and financial criteria, though both the endorsement label and the tax rebate scheme would have to be checked with EU law (which could still result in longer preparation times for these instruments). And it would fit international criteria, provided that international policy convergence would focus on product criteria and not on subsidy schemes.

These conclusions were the starting point for phase three, the design of a new policy.

Designing a New Energy Efficiency Policy for Domestic Appliances

The starting point for the design of a new energy efficiency policy for domestic appliances was the idea that the effectiveness of existing policy could be improved by introducing an endorsement label for high efficiency products coupled with a share of a tax rebate. Market transformation theory, market party consultations, legal and financial analyses and international consultations all resulted in a positive answer to the question whether such

a policy would be feasible and effective, but also in criteria and preconditions that needed to be met for this new policy to work.

A new national endorsement label and rebate scheme. The core of the new policy resulting from EASY would be a national endorsement label coupled with a tax rebate for products meeting certain criteria. The endorsement criteria should be coordinated, as far as possible, with neighboring countries. The new tax rebate scheme could be implemented by 1 January 2003, but a new endorsement label, could take up to a year more to implement due to longer preparation times needed.

The scope of the new policy will be much wider, covering all major energy consuming appliances rather than just white goods and installed appliances. The new policy will also take into account the links between the Netherlands and overall European markets and the consequent importance of international policy coordination. EU energy labels and minimum energy efficiency standards will remain a part of Dutch policy but in a much smaller role.

Communicating a change in the scheme. The implementation of this new policy will require a preparation period, during which new instruments are developed and implemented, and a well-planned and well-managed transition period, during which some old and some new elements co-exist while the development of new elements continues. This transition period will require a communication strategy that explains changes from the old policy and prepares the public and market parties for the new policy.

The main differences from existing Dutch policy are that this new policy is based on a national endorsement label and will no longer endorse appliances that already have a major market share. National policy will, under this new proposal, still use EU labeling, but these will no longer be the primary policy components. Still, there are a lot of similarities between the old and new policies. The policy will still target appliance efficiency on the market, aiming to transform the market towards higher energy efficiency as long as it is cost-effective to the consumer. The test standards at the base of the policy will remain the current European or international ones.

An EASY Overview – Conclusions & Recommendations

The EASY project was set up to develop and assess an alternative to existing energy efficiency policy for domestic appliances. For this, a three-stage approach was followed during which (1) the policy issue at hand was defined, (2) alternative options for a new policy were initiated and one option was selected and (3) the introduction of this new policy was prepared.

Following Market Transformation theory, it was decided (in the first phase) that the new policy should tackle the (stalling) market development of highly efficient appliances in the Dutch market. A consultation of market parties and international contacts, and a legal and financial analysis (in the second phase) revealed that only one policy option, a new national endorsement label accompanied by a tax rebate scheme, was feasible. The analysis of uncertainties and necessary preparatory steps (in the third phase) led to an implementation plan that completed the proposal for a new Dutch appliance energy efficiency policy. The final results of the project have been captured in a final report (EZ Project Team, 2002),

which includes a policy proposal with an implementation plan. This proposal has been accepted by the Ministry of Economic Affairs' senior management.

Results achieved with EASY. A new policy has been designed that can improve the effectiveness of tax rebates and stimulate further market transformation. Market parties have been consulted and have expressed their support and willingness to participate in this policy. Full implementation of the policy will, however, only be possible after a one-year transition period, provided that the European Union procedures required for the implementation of a new national policy do not cause extra delays.

Consulted market party representatives indicated that the newly proposed policy would meet their expectations, as it would stimulate further market transformation (and thereby reward those market parties that have improved the performance of their products beyond the average) and would generate an long-term agenda for product endorsement (which reduces uncertainty for market party investments).

International contacts indicated that the new policy would allow for international convergence of product endorsement, which is believed (by market parties and government representatives alike) to lead to improved market transformation in the Dutch market and that of neighboring countries.

The legal and financial analysis led to the conclusion that the new policy would improve the effectiveness and efficiency of Dutch government spending (which is a general governmental goal) and would not be in direct conflict with EU law (because it would be based on European test standards and would be open to international market parties). It would, however, be a deviation of EU policy, which might lead to resistance in other EU member states.

Looking back on the project design. The project was designed to facilitate re-adjustment of all steps in the process in all phases of the project. This design has proven to be effective, as it allowed for adjustments in problem definition, selection of solutions, analysis of uncertainties, and choice of measures during all phases as new information became available. The project design also allowed for discussions of draft proposals with external parties – thereby stimulating feedback – and a gradual refining of the policy proposal. The result of the project was a policy proposal including an implementation plan that is a balance between the Dutch policy goals, market party expectations, possibilities for international cooperation and legal conditions. The Strategic Choice methodology proved successful as a tool for achieving this balance.

Recommendations for future policy development projects. Appliance markets are becoming more and more international. Some products (like IT equipment) are already marketed worldwide, other products are marketed per continent. This limits the possibilities for national policy and calls for international cooperation. It is recommended that this international cooperation (between national governments) receives more attention and is organized in a transparent and well-structured way.[11]

Market consultations, at an early stage of policy development, are an important aspect of a successful policy project. Market parties hold parts of the required information and are a

[11] The Market Transformation Policy Information Forum, www.mtpif.com, is a platform that serves further international discussions surrounding EASY.

key actor in initiating future efficiency developments. Their early involvement leads to a policy that balances their needs with government's goals. It proved to be essential that market parties are consulted more than once, to give them the opportunity to give input at the various stages in the policy development, and to allow them to consult their own organization.

Legal barriers can be an important issue when developing a policy for traded goods. EU law includes provisions that are intended to minimize barriers for trade. A national label can be such a barrier, if it doesn't give international market parties equal opportunities as national ones. Enough attention for international legal frameworks (like EU law, NAFTA and perhaps WTO-regulations) is strongly recommended.

A project design that balances the interests and views of all involved parties (governments, agencies, market parties etc) is required for an effective policy development. This calls for a methodology that allows for a review of early stages in the project development (like problem definition) during later stages, as new information – possibly from new involved parties – becomes available. The Strategic Choice methodology provides such an approach and is recommended as a project design tool.

References

CECED. 2001. *Presentation to the European Union Energy Labelling Regulatory Committee*, *19 December 2001*. CECED (European Electric Domestic Appliances Manufacturers Association).

EZ Project Team. 2002 EASY, *Energy efficient Appliances StrategY*. Ministry of Economic Affairs, Klinckenberg Consultants, Novem. (unpublished)

Hastie, Steve, Ralph Prahl, Phil Mosenthal, Ann Clarke and Barbara Klein. 2000. "A Systematic Approach of Theory-Based Implementation and Evaluation of Market Transformation Programs." In: Efficiency & Sustainability, Proceedings 2000 Summer Study on Energy Efficiency in Buildings. American Council for an Energy-Efficient Economy.

Hickling, Alan. 1975. *Aids to Strategic Choice*. Centre for Continued Education, University of British Columbia, 1975.

Ürge-Vorsatz, Diana and Jochen Hauff. 2000. "Drivers of Market Transformation Towards Energy Efficiency: Analysis of a Case Study." In: Efficiency & Sustainability, Proceedings 2000 Summer Study on Energy Efficiency in Buildings. American Council for an Energy-Efficient Economy.

Vlehan. 2002. *Annual Report 2001*. Vlehan (National Association of Domestic Appliance Importers).