Communicating the Idea of Resource Efficiency: Success Factors and Approaches

Executive Summary

Summary report of Task 13 within the framework of the „Material Efficiency and Resource Conservation“ (MaRess) Project
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you will find on www.ressourcen.wupperinst.org

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Communicating the Idea of Resource Efficiency: Success Factors and Approaches

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1 Communicating the Idea of Resource Efficiency: Success Factors and Approaches – the Nature of the Task

Underlying the development of a communications strategy is a single vision: in five to ten years’ time actors in industry, politics and society will have the principle of using resources efficiently so firmly anchored in their minds that it will automatically guide their behaviour. There are, after all, a number of pertinent facts pressuring people to change the way they use resources: A growing world population and steady economic advancement, particularly in the threshold countries and most especially in the populous states of China and India, is leading to a sharp increase in global resource consumption. The major economic, ecological, social and security implications of this trend make the efficient use of resources an economic, ecological and social imperative that has already been translated into policy. These facts in themselves already offer a number of central messages and ideas that could provide part of the input for a successful communications strategy.

As we know, however, objective arguments are not always what motivates people to act in pursuit of a common goal; nor are they necessarily sufficient to change existing modes of production and consumption habits among people whose interests and views not only differ but in some cases are diametrically opposed. This is where a long-term, systematic communications strategy with clearly defined goals comes in. The first task of such a strategy will be to identify central target groups, to define tactical elements and to establish the roles that lobbying and public relations will play. It will also seek to win the commitment of other like-minded groups and to find out where the interests of different target groups overlap as a basis for further communications work.

The goal of Task 13 was therefore to use the key competencies and realms of practical experience at the participating institutions – the Wuppertal Institute (education, communication of scientific concepts, policy concepts), the Institute for Consumer Journalism (mass media), the advertising agency GoYa! (concepts and brand marketing for sustainability and environmental communication) and MediaCompany (theme branding, PR concepts) as well as the comments offered by Lucia Reisch from the SRH University of Applied Sciences Calw (sustainability communication) – to sound out the potential for communicating the idea of resource efficiency in the most successful way possible. Step 13.1 was devoted to an “Analysis of the Success Factors for Communicating the Idea of Resource Efficiency”. Step 13.2 evolved “Concepts for How to Market the Idea Successfully”. These comprised a two-pronged communications strategy aimed at particular target groups. Specifically it:

- developed a campaign and PR concept as far as the commissioning stage
- formulated policy approaches for communicating resource efficiency in education

Educational pilot projects implemented in Step 13.2 as part of the Innovation Campus devoted to resource-efficient design included a seminar on sustainable households and a summer school devoted to resource efficiency-oriented industrial design. It was ex-
MaRess – Task 13 “Communicating the Idea of Resource Efficiency”: Executive Summary

 implicitely stated that realising the communications concept beyond the pilot phase was not part of the remit of Task 13.

The findings of Step 13.1 “Analysis of the Success Factors for Communicating the Idea of Resource Efficiency” can be found in Resource Efficiency Paper 13.1 (Liedtke / Kristof / Parlow / Fasel / Reinermann / Austermann / Reisch / Baum / Albrecht 2009). The concepts for target-group-specific communications strategies developed by Step13.2 were presented to the state secretary of the Federal Ministry of the Environment on 20 April and 8 July 2009. The PowerPoint transparencies used for this presentation are documented in Resource Efficiency Paper 13.2 (on education; Kristof / Liedtke 2009) and in Resource Efficiency Paper 13.3 (on campaign & PR strategy; Albrecht / Baum 2009). The seminar on resource-efficient design Nachhaltige Haushalte/Sustainable Households was held in the winter semester of 2008/09 at the Folkwang University in cooperation with the Department of Industrial Design. The 1st Sustainable Summer School: design walks_value through less" took place from 27 September to 4 October 2009 at the Nikolauskloster in Jüchen. The findings of the summer school were summarised in a brochure produced in cooperation with the participating design departments (Resource Efficiency Paper 13.4; Wolf / Liedtke 2010). All the findings of Task 13 and the other MaRess tasks can be downloaded at: http://ressourcen.wupperinst.org.

Task 12 “Consumer- and Client-Focused Approaches to Increasing Resource Efficiency” formulated schemes for getting consumers to use resources more efficiently in their daily lives (Kristof / Süßbauer 2009). These could serve as a basis for the communications strategy developed in Step 13.2.

2 Analysis of the Success Factors for Communicating the Idea of Resource Efficiency

Increasing resource efficiency will require a broad social “resource movement” with a vision of a new resource-efficient way of living and running the economy that strives to make this the new status quo. But how should one go about translating the idea of resource efficiency – for many people a rather abstract concept – into a fundamental premise for behaviour at all levels of society? How can the idea of resource efficiency be successfully communicated? To whom should a communications campaign be addressed? And what instruments should it use? With these questions in mind Step 13.1 analysed the relevant theoretical perspectives, looking for suitable communications instruments and evaluating selected public information campaigns in terms of their potential success and impact (Liedtke / Kristof / Parlow / Fasel / Reinermann / Austermann / Reisch / Baum / Albrecht 2009). It identified the following as key factors for a successful communications strategy:

A successful communications campaign must attract attention and heighten awareness by highlighting the causes of and possible solutions to the efficiency problem – ideally
via an emotionally charged or entertaining communications strategy. Most crucially it should communicate the direct benefits to the consumer of resource efficiency, portray alternative forms of behaviour convincingly and convey its message in an attractive, emotionally appealing and positively entertaining form. The message should be directly relevant to everyday life and as simple as possible. It should challenge generally accepted notions of what constitutes normal or desirable behaviour by presenting conventional lifestyles and modes of production as outdated, while resource-efficient lifestyles and modes of production are depicted as modern.

This strategy would serve to legitimise and enhance the status of desirable alternative modes of behaviour at a theoretical level. The message is: resource efficiency is not only imperative but represents a modern, intelligent new standard, while resource inefficiency is out-of-date and passé. Showing attractive groups or well-known personalities already engaging in resource-efficient behaviour would enhance the status of such behaviour at a practical level and set new standards. Such groups should be clearly identifiable as belonging to the social mainstream, while using household names to exemplify resource-efficient behaviour would endow the campaign with authenticity, charisma and credibility, thus encouraging the individual to follow their example. By taking personalities with whom the public can identify, the campaign would convey a sense of togetherness, making those it targets feel part of a community that acts in accordance with reality-based standards.

Clear and simple messages that avoid any possibility of confusion are the most effective recipe for winning people over. Moreover, a successful public information campaign must always operate at an emotional level, playing on people’s sense of humour, pride, fears and hopes, or alternatively using the element of surprise to get its message across. Visual clarity, reduction to the essentials and clever ideas are other important ingredients. Branding in the form of a logo or symbol running through the whole campaign creates a basis for recognition and is a good way of conveying a sense of a common goal and a shared acceptance or interpretation of the issue. A single slogan may come to stand for a whole set of emotions, convey a vision and provide a sense of purpose.

A communications strategy also creates a new interpretative frame of reference for re-evaluating the costs and benefits of conventional versus new, more desirable forms of behaviour. Before it can become socially institutionalised, however, this new frame of reference must be communicated many times (repetition factor) using a variety of instruments. A campaign that peters out after a short time will not succeed in establishing a new standard and will fail to achieve the desired results. For this reason any campaign of this kind requires strategic planning based on an integrated communications concept that ensures optimal timing, a co-ordinated use of the individual instruments, and an effective build-up of tension and intensity.

As has been shown, successful campaigns usually focus their communications concepts on strategically relevant target groups with strong synergy and multiplier potential. Bearing this in mind, a resource efficiency campaign should initially focus on three
target groups, each of which offers considerable potential for disseminating resource-efficient thinking and behaviour:

- People who are open to change (for example, because they are at a turning point in their lives) and whom it is possible to target in completely new ways via new communications media like chat rooms, blogs and web 2.0 platforms such as studiVZ and Facebook – in other words, teenagers and young adults and other Internet communities. People undergoing positive life changes (whether embarking on a new stage of education, starting work, starting a family or moving in together with a partner) are those who will shape tomorrow and are therefore likely to be potential innovators with respect to resource efficiency in the medium to long term. They can be easily reached via interactive and dynamic formats (such as web 2.0 platforms, edutainment formats, guerrilla and viral marketing and popular messengers). At the request of the funding authority the concept was tailored to students as its target group.

- Politically and socially influential actors (above all key policy-makers in the private sector and in research and education, communications-oriented multipliers such as media representatives and editorial boards, or content-oriented multipliers such as trade unions, trade associations and NGOs). All of these people have ample opportunity to act and exert influence in ways that will ensure resource efficiency a permanent place on the social agenda. The best instruments for reaching this target group are those that are serious, credible and professional and have a broad exposure (e.g., conferences and congresses, trade fairs, the print media and billboards).

- People engaged in education and training (e.g., company trainers for the target group trainees and professors for the target group students) whose positions allow them to spread the resource-efficiency message to a large target group and help this group acquire the skills to put it into practice. Instruments that communicate seriousness and credibility are likewise the best ones for reaching this group.

Fundamentally, the main communications routines and channels of the respective target groups provide the best indication of which instruments are likely to be most suitable. Based on the user preferences of the target groups, instruments should be chosen that will have as broad an impact as possible. Sometimes the best effect is achieved by using a mixture of different instruments tailored to the respective target group and using them to bring the issue of resource efficiency to public attention over a long period of time in constantly changing contexts. This implies a co-ordinated communications concept that uses the different instruments in an integrative way with respect to both timing and presentation.

To do this the campaign must have a clear mission (with respect to content, finance, structure, advertising strategies etc.) and a clear organisational structure – whereby professionalism and effectiveness should be the guiding principles. A small powerful coordination team that manages to interact effectively with multiplier groups will succeeded in arousing a great deal of attention among the target groups. The campaign
could therefore also be organised as a network. This would enable swift, on-the-spot responses and promotional events as well as a high degree of flexibility and mobility. Alongside permanent networking, professional PR work would also be required.

Gaining the support of various strategic partners (e.g. foundations, networks etc.) would also enhance the campaign. Media partnerships are of special significance here since they offer opportunities for a regular presence in several different formats, including a number of radio and television stations alongside the print media. These should be in a position to address the respective target groups and enjoy broad public acceptance.

3 Concepts for Successful Marketing

3.1 The Starting Point for Developing the Concepts

Taking into account the findings of Step 13.1, the campaign concepts and PR strategy as well as the educational instruments must aim to:

- inform decision-makers and motivate them to act
- reach social groups at decisive turning points in their lives
- establish resource efficiency as a theme in education

In view of funding limits to the campaign, PR strategy and educational measures must assume a leverage effect and focus their efforts. This can be done by combining certain target groups and instruments in effective ways, since the impact that different instruments of communication have on different actors varies. Tab. 1 gives an overview of strategies that can be used to good effect and which could provide a basis for developing a campaign, PR strategy and educational measures.
Tab. 1: Target Groups & Appropriate Communication Instruments

<table>
<thead>
<tr>
<th>Communication Instruments</th>
<th>Target groups</th>
<th>Campaign</th>
<th>PR strategy</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision-makers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politicians</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media representatives</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Social multipliers</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Education system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company trainers</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Professors</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>People and systems in the process of change</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Teenagers/young adults</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet communities</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Source: Wuppertal Institute

Resource Efficiency Paper 12.1 (Kristof / Süßbauer 2009), which deals with behavioural options for private households (including working from home), offers substantial additional material.

3.2 Campaign & PR Concept

The campaign and the PR concept are built on three impact phases for initiating social movements as presented in Tab. 2. These phases correspond with three central ideas derived from Step 13.1: the first concerns the attitudes and behaviour of people who can be addressed only on an emotional level. The idea of resource efficiency tends to be a rather dry, sometimes abstract and “heavy” issue, which relies on arousing curiosity to communicate its message effectively. Simply conveying information is not a very promising approach. The second phase addresses individual behaviour and hence the individual sphere of influence. The third is about conveying the idea that individual behaviour may bring benefits of various kinds. For this reason the campaign relies on strategies that activate and inspire selected target groups and trigger certain emotions.
Tab. 2: Impact Phases for the Campaign and PR Concept

<table>
<thead>
<tr>
<th>Impact phase</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact phase 1</td>
<td>Arouse curiosity and interest</td>
</tr>
<tr>
<td>Impact phase 2</td>
<td>Create understanding and awareness</td>
</tr>
<tr>
<td>Impact phase 3</td>
<td>Generate attitudes and commitment</td>
</tr>
</tbody>
</table>

Source: Wuppertal Institute

The campaign and the PR strategy target the following groups:

• students (ca. 1.8 million) as a direct target group and
• as indirect target groups:
  - policy-makers in the private sector and in research and education
  - multipliers and opinion leaders — above all the media, educational institutions, management consultants as well as environmental and one-world associations/one-world NGOs, trade unions, consumers' associations.

The campaign design consists of four elements: the slogan, the logo, the visual elements and the tonality of the advertising. The campaign slogan conveys the central message with every contact achieved and has an activating and motivating impact. A good campaign slogan must be self-contained, memorable and programmatic, and it must also sound good. The campaign logo stands for a clear message, gives the campaign an instantly recognisable and unmistakable identity and also communicates emotions. Logos consisting of images and words usually have a more powerful impact than image-only or word-only logos, because they are easier to remember. A good logo must be self-contained and memorable; it must also be eye-catching and of high graphic quality. Like the slogan the logo must also be programmatic. The visuals must offer a look and feel that communicates emotions at both a conscious and a subcon-
conscious level, and which conjure up images in the mind and trigger positive associations with resource efficiency. The tonality must be tailored to the target group students – in other words, it must be cool, amusing, original and entertaining.

The **campaign is divided into two phases.** The first will target selected universities and serve as a kind of “warm-up” phase. It entails positioning the theme of resource efficiency and the promotional events among the students, arousing curiosity and interest and recruiting multipliers – above all, the media. During the second phase the campaign will be extended to all universities and expanded in scope. This phase would serve to acquaint a broader public with the issue, to generate attitudes and commitment, to encourage and support local campaign activities, to establish a media presence and media partnerships, to activate a support base, to broaden the information and dialogue opportunities offered by a website, to intensify advertising activities and PR, to establish a firm bond with target groups (e.g., through competitions) and to give the issue greater prominence in the political sphere (e.g. conferences, resource efficiency report).

During the **first phase** a poster and advertising campaign will be launched in universities with more than 20,000 students and an Internet presence and brochures offering more detailed information will be developed. The initial steps and concrete measures in the first phase are:

- Important basic ideas for presenting the communications campaign:
  - Present the issue of resource efficiency in terms of the weight of the total resources consumed using images or metaphors such as the “ecological rucksack”.
  - The advertising material itself should be reusable or multi-purpose material. In order to make the idea of saving resources practical and credible, the campaign should aim to be resource efficient per se. Setting an example by using advertising material in a sparing and conservational manner already represents a message and an attitude in itself. Where possible, instead of producing new advertising material such as posters, leaflets/flyers, postcards etc. existing advertising material should be used (e.g., by printing over existing material), The main message: “This method of communication represents resource efficiency in practice” should cause people to reflect and think about what they do.

- Select pilot universities. Acquire co-operation partners and stage pilot learning events (e.g. a pilot summer school/Innovation Campus for resource-saving product design; see Chapter 4).

- Prepare press material to introduce and accompany the campaign. Prepare press information from the Federal Ministry of the Environment for the campaign launch, offer interviews at ministerial level, provide carefully formulated press releases on the subject of resource efficiency for student media and web platforms (including Unicum, studiVZ and university newspapers).
• Prepare campaign media: Develop and launch an Internet presence; design and produce motifs for posters, newspaper advertisements and promotional postcards. Design and produce information brochures and flyers.

• The **second phase** will comprise a broad cinema, poster and newspaper advertising campaign plus indoor and outdoor promotional events and online presentations for all universities.

The second phase will comprise the following main measures:

• Important basic ideas for a communications presence:
  - Targeted and broad-ranging VIP poster campaigns at universities. These would use well-known personalities to draw more attention to the issue and to set an example, thus familiarising the public with the campaign and enhancing its image. The style of the campaign should be eye-catching and involving, its tonality “loud”, disconcerting and emotional. The key features of the concept are: the use of well-known faces to draw a lot of attention to the message, the disconcerting effect of larger-than-life images of objects, dramatised scenarios that make people curious to visit the campaign website to see the resolution and a catchy and personalised headline format such as “Why Cindy’s lipstick weighs more than you think!”. This type of presentation would give the campaign a human face.
  
  - Further develop the basic idea of resource-saving advertising material: e.g. use page corner ads combined with graphic highlighting of words in newspaper or magazine texts in target-group media (e.g. student magazines like Unicum and Neon or university newspapers) or fill towel dispensers in universities and student pubs with towels carrying information about resource conservation. The tonality of such information would vary.
  
  - Design and stage promotional events: indoor events (e.g. a sign slalom race, an on-campus art park or a poetry slam) or outdoor events (e.g. flash mobs that might take place as follows: the flash mob is announced in advance via e-mail distribution lists to universities, groups on studiVZ and via MySpace, Facebook and YouTube. On the day the flash mob is to take place the students meet at a prearranged time and place. They each tuck a newspaper under their arm and walk around the venue. At an agreed time they all suddenly stand still and begin to read the newspaper. After a certain time, as if responding to a signal, they lay the newspaper on the ground and run off in all directions. The newspapers now serve as flyers and are picked up by other students.)
  
  - Online: Service and update the website, adding more detailed information. Enhance activity on web 2.0 platforms (e.g. sponsored groups).

• Intensify PR work:
  
  - Enhance the prominence of resource efficiency as an issue in the political sphere (e.g. conferences, resource efficiency report).
- Offer research grants for young journalists. To obtain such grants journalists would be required to submit concepts for how they intend to treat the subject of resource efficiency in journalism. A specialist jury would award grants in the categories print media, radio, television and online media.

- Invite journalists to presentations of new resource-efficient products and processes at companies or research institutions. These presentations would include examples of best practice and personal success stories of people who have managed to implement good ideas.

- Offer material to editorial departments that tells stories and creates images in people’s heads in order to facilitate journalistic work: provide film footage, produce features for television and radio, create information graphics and photos for print and online media.

- Build up media partnerships (specialist and general media).

- Stage Innovation Campuses and hold competitions (e.g. the “Design for resource-efficient products” competition staged by university design departments, the poster competition “Resource efficiency at home” or the competition for the best video spot promoting greater resource efficiency). Competitions could also be staged in cooperation with companies.

More concrete proposals for campaigns and PR strategies can be found in Albrecht / Baum (2009).

### 3.3 Educational Policy Approaches

Another way of strengthening resource competency is via educational policy. This consists of two components: basic knowledge and the skill to put that knowledge into practice, which also includes the ability to understand systems. The goal here is to enable people to translate knowledge into action, thus providing visible evidence of successful learning.

Many people contribute to the educational process. The policy proposals aim to reach the following actors: teachers at general and vocational schools, professors at relevant universities, company staff responsible for training, actors involved in teacher training and intermediary institutions that provide educational materials.

The target group of this educational strategy is mainly the 15–30 age group – i.e., school pupils, apprentices and trainees, students and people embarking on careers. This group was chosen in order to reach the decision-makers of tomorrow and to broadly increase resource competence.

Tab. 3 gives an overview of the strategies proposed for imparting basic knowledge, the instruments selected for this purpose and the goals to be achieved. Concrete proposals for the educational strategy can be found in Kristof / Liedtke (2009).
Tab. 3: An Overview of Education Policy Approaches for Resource Efficiency

<table>
<thead>
<tr>
<th>Basic strategies and instruments</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impart basic knowledge</strong></td>
<td>➔ Convey resource competence</td>
</tr>
<tr>
<td>• Internet platform teaching/learning materials for resource efficiency</td>
<td>➔ Ensure fast and simple access</td>
</tr>
<tr>
<td>• Study seminars</td>
<td>➔ Teacher training</td>
</tr>
<tr>
<td><strong>Stage educational events</strong></td>
<td>➔ Experiment with resource efficiency</td>
</tr>
<tr>
<td>• Innovation Campus</td>
<td>➔ Develop resource-efficient products/services</td>
</tr>
<tr>
<td>• Jugend forscht/Jugend gründet (Young Researchers/Young Entrepreneurs competitions)</td>
<td>➔ Develop innovation skills</td>
</tr>
<tr>
<td><strong>Consolidate excellence</strong></td>
<td>➔ Strengthen resource efficiency in universities</td>
</tr>
<tr>
<td>• Virtual resources university</td>
<td>➔ Network university departments</td>
</tr>
<tr>
<td>• Integrated/dual courses of study</td>
<td>➔ Coordinate teaching activities and open them up to new target groups</td>
</tr>
</tbody>
</table>

Source: Wuppertal Institute

**Impart Basic Knowledge**

The goal of the **Internet platform** (e.g. [www.ressourceneffizienz-wissen.de](http://www.ressourceneffizienz-wissen.de)) would be to provide structured teaching and learning materials on the subject of resource efficiency throughout Germany. This would make educational material readily available for teachers and vocational trainers and also for adult education programmes.

**Seminars** could be staged on a national scale to train teachers to teach the subject of resource efficiency. One approach would be to develop courses and training courses for the seminars to familiarise future teachers with the subject. Another would be to get future teachers – guided by their trainers – to produce their own teaching/learning materials on resource efficiency as part of their practical training. These could then be shared via an Internet platform thus utilising synergy effects.

**Stage Educational Events**

Students and professionals working in the field of design and product development could attend one- to six-week interdisciplinary workshops or summer schools on an innovation campus where they would develop innovative product service solutions/systems. During such activities university faculty would provide teaching input for both students and practitioners. The trans-disciplinary approach would also give them opportunities to further qualify themselves by exchanging ideas with design practitioners. Chapter 4 presents the pilot projects carried out in the framework of Task 13.

Schools pupils aged fourteen and above could develop resource efficiency innovations within the framework of special events like **Jugend forscht/Jugend gründet** (Young Researchers/Young Entrepreneurs competitions).
Researchers/Young Entrepreneurs). To help these teenagers and young adults acquire the requisite level of knowledge quickly and effectively, both school teachers and universities and institutions active in innovation and research transfer in the field of resource efficiency could act as mentors.

Consolidate Excellence
The goal would be to build up a university network comprising university departments already engaged in resource efficiency research (including energy and energy efficiency) whose task would be to conduct interdisciplinary research into strategies for raising resource efficiency, to develop joint research projects and to apply for funding. Our vision is to create a "virtual resources university" that would use synergy effects to strengthen research and teaching in the area of resource efficiency. This would require both a network concept and joint projects to put this into practice. Shared laboratory and project facilities and joint innovation workshops and innovation campus events would help to make this a cooperative effort that would promote exchange between researchers and broaden the study programmes and material on offer.

Another possibility might be integrated and dual courses of study that would forge closer links between in-company training and university education. This would require such courses to be part of an overall concept for studying geared towards lifelong learning and a flexible education system.

The educational policy approaches developed in Task 13 were also integrated in the policy mix of Task 4 “Innovative Resource Policy Approaches at the Micro-Level: Business-Oriented Instruments and Approaches” in the Step 4.2 detailed analysis paper “Efficiency Awareness and Performance” (Görlach / Schmidt 2010) and in the Step 4.2 milestone paper “Proposals for Resource Policy Measures in the Field of Business-oriented Instruments” (Liedtke / Kristof / Bieng / Geibler / Görlach / Knappe / Lemken / Meinel / Onischka / Schmidt / Zvezdov 2010).

4 Innovation Campus on Resource Efficiency-Oriented Industrial Design – the Pilot Projects
In two pilot projects formats were developed and tested with a view to developing a concept for an Innovation Campus on resource efficiency-oriented industrial design. One of these projects –“Sustainable Households / Nachhaltige Haushalte” – was held parallel to general university teaching at the Folkwang University Essen in co-operation with the Department of Industrial Design during the winter semester of 2008/09. The other was the “1st Sustainable Summer School: design walks_value through less” staged by the University of Wuppertal and the Wuppertal Institute. Staged in autumn 2009 this built on the experience gathered during the sustainable households seminar as well as on other workshops and educational events organised by the participating partners. Four departments of design from Germany and Switzerland were involved in
the summer school, which was attended by students from thirteen countries (Wolf / Liedtke 2010).

4.1 The Folkwang University – An Educational Event as an Pretest

In the winter of 2008/09 a preparatory seminar for the 1st Sustainable Summer School was staged at the Folkwang University led by Professor Anke Bernotat (Department of Industrial Design), Dr. Christa Liedtke and Dr. Jola Welfens (Wuppertal Institute). The subject of the seminar was sustainable households. Since the majority of the students came from Asia and Scandinavia the seminar was conducted mainly in English.

It began by giving the students a thorough grounding in the field of sustainable development and resource efficiency. Parallel to this the students chose topics for their design projects in the field of private consumption. Their first task here was to identify aspects of households that were very resource inefficient and that could be made more resource-efficient by means of eco-intelligent service and product design. The students then thoroughly researched the areas they had chosen (e.g., showering, cooking) and subsequently developed scenarios for at least three different development approaches. These were then evaluated in terms of their impact on sustainability and resource efficiency and, of course, whether they satisfied the consumer requirement. On this basis a scenario was chosen for the subsequent design study during which design solutions were developed and improved on in several phases of reflection and evaluation. A total of ten studies were conducted. Some of the most interesting examples were the resource-optimised use of food (Food Alarm), power socket strips, in-house information systems (Eco Racer – Conscious Consumption), resource-optimised showers (Green Romantic), a lift to transport shopping upstairs targeted at senior citizens and a resource-efficiency campaign for the university campus itself, which was implemented at Folkwang University. The results were presented at one of the major conferences of the Resource Efficiency Network (Task 10) and very positively received (www.netzwerk-ressourceneffizienz.de/to_join/netzwerkkonferenzen/vierte_konferenz: “Resource Efficiency as a Starting Point for Product Design – Concrete Findings from the Seminar at Folkwang University”: Prof. Dr. Anke Bernotat / Swantje Krauß, Folkwang University). The resource efficiency campaign is aimed at students. Its goal is to raise their awareness of resource efficiency and to reach them via multiple media at a place where they spend a lot of time.

4.2 1st Sustainable Summer School: designwalks_value through less

In preparation for the 1st Sustainable Summer School the University of Wuppertal and the Wuppertal Institute approached a number of other departments of design, academies and other actors with respect to resource/eco-efficiency or sustainability. Together the following six institutions used their specific experience to develop the international profile of the 1st Sustainable Summer School: designwalks_value through less: the University of Wuppertal / Department of Industrial Design, Folkwang University...
In the field of design it is usual to offer students the opportunity to attend international educational events of this kind during the summer break, so they attract a wide range of students. The vision of the participating partners is:

- to offer a top-quality educational programme in the field of sustainable and resource-efficient design
- to develop the image of Germany as an organiser and initiator in the field of sustainable and resource-efficient design
- to create a high-ranking network by giving the participating departments an international outlook
- to make it easier to implement resource-efficient design in practice by including private-sector sponsors

The 1st Sustainable Summer School was one of the first steps in this direction:

- Held in autumn 2009 the 1st Sustainable Summer School was attended by thirty-two students from thirteen countries – around half of whom had a bachelor’s or master’s degree.
- Alongside students’ fees the 1st Sustainable Summer School also received funding from private-sector sponsors.
- The 1st Sustainable Summer School received input via the active participation of practitioners from science and industry in an inter- and trans-disciplinary process.
- The first two days of the 1st Sustainable Summer School were spent attending an international conference on the subject of sustainable products and services. This enabled participants to build up networks with academics and practitioners and also to exhibit their own ideas for sustainable products and services.
- During the three days following the conference university lecturers and scientists who were engaged in research in the fields of resource efficiency and sustainability got together with the students to come up with preliminary concepts for more resource-efficient services (e.g. Slow Shopping, localfoodsfinder.de, car.munity, soop wareshare etc.) in the following four thematic workshops:
  - Rituals, habits and lifestyles
  - Lifestyle light
  - What if ... exploring alternative services
  - Luxury and sustainability
• After completing the summer school students were awarded a certificate which they could use to obtain study credits.
• The Internet platform [www.designwalks.org](http://www.designwalks.org) was created as a work in progress.
• The summer school also managed to get departments of design abroad interested in participating.

### 4.3 Innovation Campus on Resource Efficiency-Oriented Industrial Design – Looking Ahead

In the final evaluation the students gave a very positive assessment of the 1st Sustainable Summer School and also developed their own network on Facebook. Both the 1st Sustainable Summer School concept and the results were documented in a brochure (Wolf / Liedtke 2010).

The Innovation Campus concept is currently being further developed. The goal is to actively involve further design departments from abroad in the process. A sponsorship and grants concept is also being developed with the aim of reaching potential sponsors, project funders and grant givers. In addition there are plans to use the homepage of the Sustainable Summer School as a platform for exchanging ideas. Formats suitable for this purpose currently being developed will also be accessible to interested companies and inventors, thus encouraging them to interact and exchange ideas (cf. the innovation agents and innovation laboratories approach in Task 4 "Innovative Approaches to Resource Policy at the Micro-Level: Business-Oriented Instruments and Starting Points"; Lemken / Meinel / Liedtke / Kristof 2010).

Work is also under way to implement and further develop the concepts students came up with at the 1st Sustainable Summer School (e.g. Slow Shopping, CarMunity etc.). Both the advanced concepts and the next steps to be taken will be presented and further developed at future events (the next Sustainable Summer School, Design Management Forum, exhibitions etc.).

The 2nd Sustainable Summer School will take place from 29 August to 4 September 2010. The concept allocated more time to concept development with input from experts as well as a brief period of reflection each morning. The first day of the summer school was a Seniors Day to which high-calibre experts and external interested guests were invited to hold discussions.
5 Overview of the Products of Task 13 and Literature

Resource Efficiency Paper (Download under http://ressourcen.wupperinst.org)

Liedtke, Christa / Kristof, Kora / Parlow, Kristin mit Unterstützung von Fasel, Christoph / Reinermann, Julia-Lena / Austermann, Claudia / Reisch, Lucia / Baum, Holger / Albrecht, Roland (2009): Analyse der Erfolgsfaktoren für die Kommunikation der Ressourceneffizienzidee; Meilensteinpaper zu Arbeitspaket 13 des Projekts „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 13.1


Wolf, Brigitte / Liedtke, Christa (Hg.) (2010): 1st Sustainable Summer School: designwalks_value through less; Wolf, Brigitte / Liedtke, Christa / Schmidt-Bleek, Friedrich / Radau, Michael / Lettenmeier, Michael / Bernotat, Anke / Gellersen, Nina / Draser, Bernd / Welfens, Maria Jolanta; Paper zu Arbeitspaket 13 des Projekts „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 13.4


Kristof, Kora / Liedtke, Christa (2010): Communication of the idea of resource efficiency: success factors and strategies; Executive Summary Task 13 within the framework of the „Material Efficiency and Resource Conservation“ (MaRess) Project, ResourceEfficiency Paper 13.6


Pilot projects

Sustainable Households / Nachhaltige Haushalte, Lehrveranstaltung Wintersemester 2008/09, Folkwang Hochschule Essen – Industrial Design, Prof. Anke Bernotat, Dr. Christa Liedtke, Dr. Jola Welfens

1st Sustainable Summer School 2009: designwalks_value through less, September 2009, Prof. Anke Bernotat (Folkwang Hochschule), Bernd Draser (Ecosign), Nina Gellersen (Hochschule Luzern), Michael Kuhndt (UNEP/WI CSCP), Dr. Christa Liedtke (Wuppertal Institut), Prof. Brigitte Wolf (Universität Wuppertal)
Input from other MaRess Tasks useful for Task 13:
Starting Points for Raising Resource Efficiency in Everyday Consumer Behaviour

Kristof, Kora / Süßbauer, Elisabeth (2009): Handlungsoptionen zur Steigerung der Ressourceneffizienz im Konsumalltag; Papier zu Arbeitspaket 12 des Projekts „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 12.2

Input from Task 13 used for other MaRess Tasks:
The Task 13 proposals for education policy and for the Innovation Campus were also included in the Task 4 Policy Mix “Innovative Approaches to Resource Policy at the Micro-Level: Business-Oriented Instruments and Starting Points”.

Liedtke, Christa / Kristof, Kora / Bienne, Katrin / Geibler, Justus von / Görlach, Stephanie / Knappe, Florian / Lemken, Thomas / Meinel, Ulrike / Onischka, Mathias / Schmidt, Mario / Zvezdov Dimitar (2010): Maßnahmenvorschläge zur Ressourcenpolitik im Bereich unternehmensnaher Instrumente; Meilensteinpaper zu Arbeitspaket 4 des Projekts „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 4.6

Görlach, Stephanie / Schmidt, Mario (2010): Maßnahmenvorschläge zur Ressourcenpolitik im Bereich unternehmensnaher Instrumente; Feinanalysepaper für den Bereich Public Efficiency Awareness & Performance zu Arbeitspaket 4 des Projektes „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 4.4

Lemken, Thomas / Meinel, Ulrike / Liedtke, Christa / Kristof, Kora (2010): Maßnahmenvorschläge zur Ressourcenpolitik im Bereich unternehmensnaher Instrumente; Feinanalysepaper für die Bereiche Innovation und Markteinführung zu Arbeitspaket 4 des Projekts „Materialeffizienz und Ressourcenschonung“ (MaRess), RessourceneffizienzPaper 4.5