SEVENTH FRAMEWORK PROGRAMME
THEME ENERGY.2007.9.1.2
Energy behavioral changes

Grant agreement for: Collaborative Project (small or medium-scale focused project)

Annex I – "Description of Work

Proposal acronym: CHANGING BEHAVIOUR
Project full title: *C*ontextualising be*ha*vioural change in e*n*ergy pro*g*rammes involving *i*ntermediaries and policymaki*n*g or*g*anizations working towards changing BEHAVIOUR
Grant agreement no: 213217

Date of preparation of Annex 1: [October 26, 2007]
Date of approval of Annex 1 by Commission: December 21, 2007

List of Beneficiaries

Beneficiary no.	Beneficiary name	Beneficiary short name	Country	Date enter project	Date exit project
1 (coordinator)	National Consumer Research Centre	NCRC	Finland	1	36
2	Energy research Centre of the Netherlands	ECN	Netherlands	1	36
3	University of Salford, SURF Centre	SURF	United Kingdom	1	36
4	Institute for Applied Ecology, OEKO Institut e.V	OEKO	Germany	1	36
5	Central European University	CEU	Hungary	1	36
6	Stockholm Environment Institute Tallinn Centre	SEI-T	Estonia	1	36
7	UAB Cowi Baltic	Cowi Baltic	Lithuania	1	36
8	Energy Service Company Enespa Ltd	Enespa	Finland	1	36
9	Manchester Knowledge Capital (M:KC) /Manchester Enterprises (ME)	M:KC	United Kingdom	1	36
10	GreenDependent Sustainable Solutions Association	Green-Dependent	Hungary	1	36
11	Ekodoma	Ekodoma	Latvia	1	36
12	Verbraucherzentrale Nordrhein-Westfalen e.V.	VZ NRW	Germany	1	36
13	Centre for Renewable Energy Sources	CRES	Greece	13	36

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PART A

A. 1 Overall budget breakdown of the project

A3.2:
What it costs

Project Number ₁	213217	Project Acronym ₂	CHANGING BEHAVIOUR

One Form per Project

Participant number in this project ₃	Participant short name	Estimated eligible costs (whole duration of the project)					Total receipts	Requested EC contribution
		RTD / Innovation (A)	Demonstration (B)	Management (C)	Other (D)	Total A+B+C+D		
1	NCRC	455,624.00	0.00	127,504.00	0.00	583,128.00	0.00	469,222.00
2	ECN	499,954.00	0.00	67,527.00	0.00	566,481.00	0.00	441,743.00
3	SURF	270,200.00	0.00	20,600.00	0.00	290,800.00	0.00	223,250.00
4	OEKO	427,445.00	0.00	31,445.00	0.00	458,890.00	0.00	352,029.00
5	CEU	164,280.00	0.00	13,240.00	0.00	177,520.00	0.00	136,450.00
6	SEI-T	120,878.00	0.00	8,882.00	0.00	129,760.00	0.00	99,540.00
7	Cowi Baltic	96,600.00	0.00	7,800.00	0.00	104,400.00	0.00	55,100.00
8	Enespa	130,200.00	0.00	10,200.00	0.00	140,400.00	0.00	107,850.00
9	ME	267,672.00	0.00	18,792.00	0.00	286,464.00	0.00	219,546.00
10	GreenDependent	72,600.00	0.00	6,600.00	0.00	79,200.00	0.00	61,050.00
11	Ekodoma	85,560.00	0.00	7,410.00	0.00	92,970.00	0.00	71,560.00
12	VZ NRW	177,919.00	0.00	13,182.00	0.00	191,101.00	0.00	146,621.00
13	CRES	105,000.00	0.00	12,000.00	0.00	117,000.00	0.00	90,750.00
TOTAL		2,872,932.00	0.00	345,182.00	0.00	3,218,114.00	0.00	2,475,731.00

A.2 Project summary form

A1:
Our project

Project Number 1	213217	Project Acronym 2	CHANGING BEHAVIOUR

ONE FORM PER PROJECT

GENERAL INFORMATION			
Project title 3	Contextualising behavioural change in energy programmes involving intermediaries and policymaking organizations working towards changing BEHAVIOUR		
Starting date 4	01/01/2008		
Duration in months 5	36		
Call (part) identifier 6	FP7-ENERGY-2007-1-RTD		
Activity code(s) most relevant to your topic 7	ENERGY-2007-9.1-02: Energy behavioural changes	ENERGY-2007-9.1-02: Energy behavioural changes	SiS: Science in Society
Free keywords 8		behaviour, change, demand management, energy efficiency, end-users, stakeholders, interaction models, best practices, transfer in Europe	

Abstract 9 (max. 2000 char.)

This project aims to support the shift toward end-user services in European energy policy. It will (1) develop a sophisticated but practical model of end-user behaviour and stakeholder interaction (2) integrate knowledge of context (e.g., national culture and institutions), timing and actors into demand management practice (3) pilot the transfer of context-tailored demand side programmes from one European country to another (4) create a toolkit for practitioners to manage the social and technical change involved in demand management programmes (i.e., energy efficiency and renewable-based end-user generation). This toolkit will be sensitive to the influence of context, timing and actors, and will thus facilitate the cross-country transfer and adaptation to local context of European best practices. The toolkit will in particular address the diversity of conditions and behaviour patterns in old and new EU Member States. This project will work through intensive co-operation between researchers and intermediary organisations in the field of demand management (i.e., informative instruments, pilot projects, auditing and investment support, voluntary agreements, third-party financing schemes and the like). Such organisations include governmental or semi-governmental energy agencies, non-governmental organisations, consultancies and energy service companies. Together with these organisations, the project will evaluate and analyse behavioral responses to demand side measures, and test the transfer of demand side programmes from one European context to another. This collaborative project will create new knowledge on energy related end-user behaviour and will ensure that this knowledge is useful for practitioners and policy makers in different parts of Europe.

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B 1. Concept and objectives, progress beyond state of the art, S/T methodology and work plan

B 1.1 Concept and project objectives

Introduction

Existing energy demand management programmes have exhibited a range of more and less successful results in terms of energy demand reduction, but the reasons for success or failure are not fully understood. The CHANGING BEHAVIOUR proposal is based on the notion that the role of cultural context, actors (end-users) and timing in the process of managing energy demand is insufficiently understood.

Improved understanding of end-user needs is increasingly important since Europe has set ambitious and far-reaching goals for managing energy demand. The aim is to shift the European energy market toward an increased focus on energy services based on end-user needs (e.g., thermal comfort rather than heat). Such a shift requires the adoption of radically innovative technologies entailing significant behavioural and social change. This requires a close understanding of end-user behaviour and needs. Here, an enhanced understanding of the role of end-users in technology adoption, appropriation and changing use patterns is key.

Improved understanding of end-user behaviour is also necessary to capture the existing potential to reduce energy consumption. The Green Paper on Energy Efficiency argues that the EU could save at least 20% of its present energy consumption in a cost-effective manner. Yet, much of this potential is dispersed in society and across Member States. The diversity of conditions in Europe presents huge opportunities and challenges for demand management. Member States exhibit very different levels of energy intensity, as well as different energy demand structures, historical infrastructure conditions, energy markets and policies, and drivers for energy efficiency and demand management. Moreover, demand reduction and energy efficiency policies are implemented within a diversity of national, regional and local cultures. Capturing the energy demand reduction potential requires changing the behaviour of target groups that are very heterogeneous, and whose energy-related behaviour is difficult to predict or to influence. It is thus extremely important to understand the role of context in the adoption of energy demand programmes. We define context here in the broadest possible sense. It entails, among others, culture on the level of a country or region, culture on the level of people's specific positions and ways of life (fatalist, optimist, hierarchic, individualist), gender issues, issues of risk and trust, economic drivers and barriers, psychological issues, demographic trends, infrastructure and institutions, and sector-specific requirements and preferences.

The Green Paper on Energy Efficiency seeks to facilitate the shift toward innovative and effective solutions through the exchange of information, experience and best practice at all levels. This requires innovative new energy demand management programmes, but also a working knowledge of why some programmes reach their goals and others do not. Because not enough is known about success and failure factors, developers of energy efficiency policies face great uncertainties as to their impact. Failures in policy implementation often come as a surprise, because public opinion surveys reflect positive attitudes toward energy conservation, and demand reduction measures also entail financial benefits for end users.

The CHANGING BEHAVIOUR project aims **to assist and involve** policy makers and practitioners/intermediaries by creating, applying and mobilising an improved understanding of the role of context, timing and actors in behavioural change. The understanding developed in the project will be codified in a toolkit that can assist both policy makers and programme

managers to develop context tailored programmes. This will be done through intensified co-operation with practitioners and policy makers involved in demand management programmes (i.e., informative instruments, pilot projects, auditing and investment support, voluntary agreements, third-party financing schemes and the like) targeted at broad and heterogeneous target groups, such as SMEs, the building sector and households (see Table 1.1 for examples).

The intermediary organisations with which the project will co-operate are active in the field of demand management. They include governmental or semi-governmental energy agencies, non-governmental organisations, consultancies and energy service companies (ESCOs). Intermediary organisations have an important role in shifting the European energy market toward an increased focus on energy services based on end-user needs, because they mediate between the contexts of energy production and consumption. They are thus in a position to learn about factors conditioning demand and end-user needs. They are also institutionally independent from the commitments of energy producers and thus can introduce innovative programmes. Intermediary organizations are also in a position to mediate programmes from one context to another. They are thus important hubs of demand-related knowledge management. They have much experiential and tacit knowledge of operating demand management programmes, but often lack the resources to analyse and conceptualise their knowledge into a form that is explicit, cumulative and transferable.

Even though intermediary organisations and policy makers are the first beneficiaries of the project, the findings and best practices identified will also be valuable for energy suppliers, distributors and retailers. Moreover, the results will also benefit companies developing and marketing energy-efficient technologies by identifying behavioural measures (and the related services) necessary to make the best use of state-of-the-art technologies.

Table 1.1 Examples of demand management programmes and the role of actors, context and timing

Examples of programmes	Examples of the impact of actors and behaviour	Examples of contextual and timing issues
Low energy building promotion (e.g., design competitions, consumer information, demo projects)	**Building users:** risks & opportunities of new technology, investment allocation, concerns about convenience, comfort, indoor air, appearance, competences in using the building **Construction companies**: risks and opportunities of new technology development, competencies, information flow within and among companies involved	**Financial market:** private & public investment support **Timing:** relation of programme to policy measures, energy price and investment cycles, demographic change **Institutions:** e.g., local zoning procedures, building permit & inspection practices **Culture:** beliefs about energy and environment, cultural meanings of and requirements for buildings
Replacement programmes for energy efficient appliances (lighting, refrigeration, household appliances)	**Consumers / users:** reaction to marketing measures and financial incentives, actual implementation of replacement and impact on households' own investments, learning to use new product, purchasing and usage patterns, ability to monitor energy use, rebound effects **Appliance providers:** products available for different kinds of users, usage instructions, supportive marketing efforts	**Distribution system:** e.g. suitability of the retailing network for distribution & take-back **Institutions:** supporting policies, institutional relations between energy providers and users **Timing:** energy & other issues in the media, appliance replacement cycles, new product introductions **Culture:** beliefs about energy, environment and appliances (quality), importance of other than energy features (design), speed of diffusion of novelty products, trust in information provided
Promotion of ESCO services for municipalities (third-party financing for energy efficiency investments or conversion to renewable fuels)	**Municipalities:** facilities management practices, procedures for decision making, relations between different departments, energy monitoring systems **Facility users:** employees and customers: acceptance, usage **Technology & service providers:** ability to co-operate, knowledge of technology in use, availability of energy audits	**Financial market:** availability of financial services and understanding of energy issues **Timing:** energy prices & policies, investment cycles **Institutions,** legal framework, mandates of decision makers at different levels, ability of state to control municipal investments, insurance systems **Culture:** culture of outsourcing vs. in-house services, culture of decision-making

Objectives

The goal of this project is to *develop and disseminate a theoretically rich but practical conceptual model and toolkit of the social and technical change involved in demand management programmes. This toolkit will be sensitive to the influence of context, timing and actors, and will thus facilitate the cross-country transfer and localisation of European best practices*.

The project **contributes to the objectives** of the Thematic Priority Area FP7-ENERGY-2007-1-RTD, in the following ways:

i. Focus on demand side measures, i.e., informative instruments, pilot projects, auditing and investment support, voluntary agreements, third-party financing schemes and the like, promoting energy efficiency, load management and renewable-based or micro-CHP end-user generation.

ii. Focus on instruments and programmes targeted at behavioural change and technology adoption in broad and heterogeneous target groups such as SMEs, the building sector and households.

iii. Create a database by means of an inventory of existing models and practices in European demand management programmes in terms of (a) target group knowledge management practices (e.g. prior research sources, surveys, target group participation) and (b) success and failure (impacts on energy consumption and target group behaviour, as well as programme and policy learning).

iv. Analyse the underlying features of more and less successful programmes, in particular in terms of context, timing and actors involved, as well in terms of the comprehensiveness of the models of social and technical change informing those programmes.

v. Co-operate with intermediary organisations to (a) develop their understanding of underlying factors and drivers in end-user adoption of new energy technologies and behaviours (b) jointly identify successful projects that have potential for transfer beyond context, as well as jointly identify features of these programmes that need to be localised.

vi. Cooperate with policy makers involved in demand management programmes to make use of their extensive knowledge and experience and to ensure a valuable feedback on the development of a practical demand management programme toolkit.

vii. Develop a toolkit that will enhance the way in which demand management practitioners understand their target groups and the social and technical factors influencing programme success, as well as improve the practitioners' knowledge management and sharing practices

viii. Initiate and carry out 4-6 pilot demand management projects in different countries, including New Member States, in close co-operation with policy makers and intermediaries, thus validating the knowledge and experience gained in objectives i-vii.

ix. Evaluate the piloted 4-6 demand management projects and evaluate the working of the concept toolkit.

x. Document the entire process, including lessons learned, into a report for policy makers and easy-to-use toolkit for demand management programme managers.

The project **contributes** to the topics addressed by the **FP7 Energy call** by**:**

- Analysing models, surveys and stakeholder participatory methods currently used in European demand management programmes, defining potentials for improvement, and identifying best practices in different contexts.
- Analysing drivers of behavioural change (e.g., demographic, social and lifestyle, cultural, historical and institutional) from a context-sensitive socio-technical perspective and developing a conceptual model enabling the management of behavioural change processes.
- Analysing and improving the social acceptability of the new energy technologies and behavioural changes introduced in European demand management programmes.

It will also contribute to methodological development in the interaction between science and society by pioneering a transdisciplinary collaborative inquiry process involving researchers, practitioners and their stakeholders. Thus, it also contributes to the topics raised in the Area 5.1.2, SiS.2007.Cta, "Framing deliberative processes fostering sustainable consumption and production" of the Capacities Programme *Science in Society*.

The project builds on the outcomes of previous FP5, FP6 and other Community projects by the partner organisations, among others DEMOHOUSE, ENERBUILD, Sustainable Transformation, RECOMODE, El-Tertiary, EnERLIn and EuroWhiteCert. It also draws on results from the *Review of the Status of Energy Service Companies in Selected Countries* conducted by CEU and funded by the World Energy Council. In particular, the project will build on experience gained in the FP5 project INTERMEDIARIES and the FP6 projects NEEDS, EMUDE and CREATE ACCEPTANCE. The project will work in close co-operation with the practitioner-operated BEHAVE project and the Energy Trophy+ project funded under the *Intelligent Energy Europe* Programme.

The **success** of the project will be **measured,** among other indicators, on the basis of:

- The degree of satisfaction of the stakeholders involved in the pilot demand management projects in which the CHANGING BEHAVIOUR project has participated. This will be assessed by means of a website survey developed specifically for these stakeholders.
- The development of 8 to 10 indicators of key elements of successful energy demand programme management
- Dissemination of the toolkit and results of this project to at least 5 targeted stakeholders per participating partner country involved in implementation of energy demand programmes.
- Measurement of the feedback of the stakeholders to whom the toolkit was disseminated through the project's website by means of the number of hits and a website survey.

B1.2 Progress beyond the state of the art

The present project aims to focus on demand management (DM) programmes, i.e., informative instruments, pilot/demonstration projects, auditing and investment support, voluntary agreements, third-party financing schemes and the like. Demand management programmes represent an emerging focus on energy services rather than energy production. They are often focused on energy efficiency and end-use energy saving, but can also include end-user generation using renewable energy sources (RES) or micro-CHP.

The greatest potential for demand side measures exists among broad and heterogeneous target groups, such as households, the building sector and SMEs. Different target groups have different kinds of drivers for and barriers to change, and designing a successful programme requires a good understanding of the *interactions between technology, behaviour and context*. These can be related to: (1) learning about and adopting new technologies, e.g., compact fluorescent lamps, pellet burners or solar thermal collectors, (2) utilisation of new services, e.g., maintenance of refrigeration equipment or investments in heat pumps made via an ESCO service and (3) behavioural changes resulting from technology adoption such as use of new equipment in the workplace or living in a passive house. These changes involve a wide range of potential configurations of new technology and user behaviour, ranging from simple issues such as becoming aware of energy consumption, or learning to use new equipment, to broad lifestyle or workplace culture change, such as the adoption of whole systems thinking[1] in building design.

Baseline: starting point of the project

Conceptualization of actors, context and timing

Demand management programme design has often been based on a few important, but quite simplifying assumptions about end-user behaviour. Programme development and evaluation has struggled to go beyond the assumption (known now to be false) that the target groups follow a simple economic rationality. For example, economists have conceptualised non-adoption of efficient technologies by referring to a 'high implicit discount rate', but there is no generally accepted explanation for why different people have different implicit discount rates.

Demand management programmes need to surmount a communication gap between the energy experts operating the programmes and the various professionals and ordinary citizens whom they try to influence. The programmes are based on assumptions (working models) about their target groups' behaviour and their willingness to adopt more energy efficient technologies. The working models of demand management programmes also involve procedures to inform programme managers of target group needs and behaviour (e.g., surveys, metering and other observational measures, target group participation) and to communicate the programme's message to the target groups. Some of these assumptions, models and procedures are valid and useful in the context in which they are applied; others

[1] Lovins, A., Lovins, H. & Hawken, P. (1999). A Roadmap for Natural Capitalism. *Harvard Business Review,* May-June 1999: 146-158. Whole systems thinking is a design approach in which a facility is designed for energy efficiency from the start, which allows savings to accumulate so that the investments in energy efficient equipment can be financed through savings accrued by installing smaller energy distribution equipment. This requires improved communication between different professionals, and an entirely new approach to facility design and cost accounting.

are not, and this is a key determinant of the successfulness of policy implementation programmes. For example, a programme can promote the adoption of energy-efficient solutions by changing the attitudes of building designers, but this is not a sufficient measure if we cannot also influence the designers' working environment[2].

Existing demand management programmes have often focused merely on technology users, and failed to address the network of *other programme stakeholders*. The Create Acceptance project has made an explicit analysis of the networks of stakeholders involved in energy programmes, and of the range of expectations that they bring to the programmes[3]. Apart from users, important stakeholders can include technology suppliers, service contractors, design professionals, companies representing competing solutions, policy makers and authorities at the national, regional and local level, NGOs, professional and trade associations, and various international networks. In successful cases, the network of stakeholders can mobilise to support the programme and promote user adoption, but fragmented networks or a failure to align stakeholders' expectations can also lead to failure in achieving targets.

There is a wide social science literature on how new and sustainable technologies are adopted in different social contexts. Socio-technical research on technology adoption, the appropriation of innovations and the relations between technology and behavioural change has made great strides in recent years[4]. Theoretically, we are much closer to understanding the role of end-users in technical evolution, as well as the social, cultural and institutional factors conditioning the rate and direction of technical change. This research has been conducted by academics, and it is mostly not very accessible to practitioners. Little of this cutting-edge research has translated into energy management practice, and there is a dire need for dialogue between researchers and practitioners.

Target group interaction and participation: integrating technology and behavioural change

Demand management programmes involve the introduction of new technology, or changes in the usage of existing technology, which requires or results in behavioural change. In recent years, a great many new technologies have been introduced for energy demand reduction (ranging from energy efficient housing design and housing components, energy-saving and energy-efficient appliances, to metering and IT-based management and feedback

[2] Berg M.A., Hubble H.W.,Shove E. (1998). Gaps, barriers and conceptual chasms: theories of technology transfer and energy in buildings - barriers to the efficient use of energy. *Energy Policy* 26: 1105-1112.

[3] e.g., Heiskanen, E., Hodson, M., Raven, R. Feenstra, Y., Alcantud, A., Bauknecht, D., Brohmann, B., Fritsche, U., Fucsko, J., Jolivet, E., Maack, M., Mourik, R.M., Onsizk-Poplawska, A., Poti, B.M. & Schaefer, B. (2007), *Factors influencing the societal acceptance of new energy technologies: meta-analysis of recent European projects*, Work Package 2 report of the Create Acceptance Project, FP6-2004-Energy-3, SUSTDEV-1.2.8. Online at http://www.createacceptance.net; Hodson, M., Marvin, S., and Simpson, V. (2007), 'Technological Transitions and Public Engagement: Competing Visions of a Hydrogen Fuel Station', in Flynn, R., and Bellaby, P., (Eds), *Risk and Public Acceptance of New Technologie*s, Palgrave-Macmillan: London; Raven, R.P.J.M. (2007), Niche accumulation and hybridisation strategies in transition processes towards a sustainable energy system. An assement of differences and pitfalls, *Energy Policy* (35): 2390-2400.

[4] For example, Verbeek, P.-P. & Slob, A. (2006). *User Behaviour and Technology Development.* Dordrecht, Springer; Rohracher, H. (Ed.). (2005). *User involvement in innovation processes. Strategies and limitations from a socio-technical perspective*. Munich, Germany: Profil Verlag; Williams, R. & Stewart, J. & Slack, R. (2005). *Social Learning in Technological Innovation.* Cheltenham: Edward Elgar; Geels, F. and Smit, W. (2000) Failed Technology Futures: Pitfalls and Lessons from a Historical Survey. *Futures* 32: 867-885.Heiskanen, E., Kasanen, P. & Timonen, P. (2005). Consumer Participation in Sustainable Technology Development. *International Journal of Consumer Studies*, 29 (2): 98-107; Hodson, M., and Marvin, S., (2007), 'Cities Mediating Technological Transitions: The Adaptability of Infrastructure and Infrastructures of Adaptability'? Geyer, H.S., and Richardson, H.W., (Eds), *International Handbook of Urban Policy*, Edward Elgar.

mechanisms). On the other hand, there has been significant progress in the target group responsiveness of demand management programmes, including an increased focus on target group interaction and participation as well as the application of state-of-the-art social marketing concepts.

Yet, sophisticated new technologies or social marketing methods on their own do not represent a sufficient formula for the large-scale adoption of new, energy-efficient technologies in society. Technology and behavioural change need to be addressed in an integrated manner. In addition there are new technologies seeping into the households, such as air conditioning and office equipment, which increase energy demand and thus require smart behaviour oriented demand management programs in order to limit this energy demand increase.

Understanding end-user needs and behaviour is particularly important when shifting the energy market toward the provision of energy services (e.g., thermal comfort, illumination, mobility). Such shifts imply radically new and different ways of fulfilling end-user needs, which in turn require enhanced understanding of end-user behaviour. Users do not necessarily use the technology in the intended ways, especially when the social and cultural distance between the technology developers or promoters and the users is large. New technologies may substitute energy-consuming ones, but may also complement them or even generate new energy-consuming activities. Thus, technology-induced behavioural change often involves rebound effects: the savings gained by new more efficient technologies are offset by a subsequent increase in consumption. Moreover, radically new technologies are difficult to accept by users due to a lack of compatibility with the institutional and cultural context and prevailing beliefs and social practices. Technology adoption often requires a learning process, which involves both the users and the technology developers and promoters.

Past experience in the transfer of best practices

Various EU programmes have initiated significant exchange of experience among demand management practitioners, which has resulted in much cross-country learning and the dissemination of ideas (for example, through the former SAVE and ALTERNER and the current Intelligent Energy Programme, the GreenBuilding and GreenLight programmes as well as the IEA DSM Programme). Most of the literature, however, has focused on success stories and programme characteristics, whereas a deeper analysis of unsuccessful programmes and contextual factors is often lacking.

Sometimes, ideas developed elsewhere are successfully emulated in another context; at other times, they are found not to work as well. For example, the ESCO model for third-party financing of energy investments has been taken up well in some European countries, while in others its diffusion has been hindered by the lack of a culture for service contracting, restrictive public procurement rules, limited understanding of energy efficiency in the financial sector, risk averseness and other contextual factors[5]. To take another example, programmes to promote the use of geothermal heat pumps have experienced very different success rates, often due to other than geographical features. On a more general level, for example the evaluation of international DSM programmes in the INDEEP database showed quite different levels of success for DSM programmes in different countries and sectors[6].

[5] E.g., Vine, E. (2005). An international survey of the energy service company (ESCO) industry. *Energy Policy* 33: 691-704.

[6] Vreuls, H. (2006). *Evaluating Energy Efficiency Policy Measures & DSM Programmes.* Volume II Country Reports and Case Examples Used fro the Evaluation Guidebook. IEA DSM. http://dsm.iea.org/

It is extremely important that demand management programmes do not try to 'reinvent the wheel', but make full use of the best practices and theoretical insights developed elsewhere. Yet, it is equally important that social and technical change programmes are not merely 'dropped' into new contexts without due attention to cultural, social and institutional constraints. History includes many examples of technology transfer efforts that have failed because of a lack of attention to contextual factors. Successful transfer requires cultural and contextual sensitivity. Among others, the EU-funded Create Acceptance project has developed a significant body of knowledge on cultural and contextual factors influencing the acceptability of new energy technologies. These bodies of research could serve to significantly enhance the efficiency of cross-national information exchange and transfer of ideas.

Successful transfer of best practices requires an understanding of the cultural conditions for and barriers to the transfer of practices from one context to another. Our project aims to provide such understanding by combining practical experiences in demand management with a sophisticated theoretical understanding of actors, timing and context. We define context here in the broadest possible sense. It entails, among others, culture on the level of a country or region, culture on the individual level of people's specific positions and ways of life (fatalist, optimist, hierarchic, individualist); gender issues; issues of risk and trust, economic drivers and barriers; psychological issues; demographic trends; infrastructure and institutions, sector-specific requirements (transport, energy, housing) and preferences (Table 1.2)

Table 1.2. Contextual factors influencing demand management programmes

<table>
<tr><th></th><th>Institutions</th><th>Culture &Values</th><th>Knowledge</th><th>Capacity and Strategy</th><th>Economic drivers and barriers</th><th>Infrastructure</th></tr>
<tr><td>National/ regional level</td><td>Policies
Educational system
Possibilities for participation</td><td>Historical attitudes, political culture</td><td rowspan="2">What is accepted as valid knowledge (on a national, regional or sector level)?</td><td rowspan="2">Capacities and srategies to coordinate organizations and individuals; availability of competencies</td><td rowspan="2">Level of GDP and national wealth

Distribution mechanisms for costs and benefits</td><td rowspan="2">Available infrastructure and sunk costs limiting infrastructure renewal (e.g., energy distribution systems)</td></tr>
<tr><td>Sector level (transport, energy, housing)</td><td>Institutional design of infrastructure sector</td><td>Sector-specific preferences (i.e. security of supply, industry culture)</td></tr>
<tr><td>Organisational level</td><td>Organisational options available</td><td>Organisational 'missions' and culture</td><td rowspan="2">Level of knowledge /information of organizations or individuals</td><td>Communication strategies, capacity and capability for control, support and resistance</td><td>Profitability, turnover and assets
Costs and benefits for the organisation</td><td rowspan="2">Available infrastructure on the organizational and individual level (e.g., adaptability of buildings)

Possibilities and limitations ensuing from surrounding infrastructure (national, regional)</td></tr>
<tr><td>'Individual' level
(taking into account gender and age issues, demographic trends)</td><td>Positions and ways of life

Existing routines and habits, norms about appropriate behaviour</td><td>Psychological issues
Preferences
Attitude towards consumption and towards outsiders
Trust, perception of risk</td><td>Strategies, capacity and capability for support and/or resistance</td><td>Income level, household assets
Costs and benefits for the individual</td></tr>
</table>

Progress beyond the state of the art

All the elements for designing and exchanging successful demand management programmes exist (technologies, marketing concepts, theoretical understanding and empirical evidence of factors influencing social and technical change and successful transfer of technologies and programmes). Yet, these different elements lack integration, which also entails an integration of academic research with practical knowledge and practitioners' knowledge management practices.

The CHANGING BEHAVIOUR project proposes to achieve such integration by bringing together the key elements of success. It aims to achieve progress in research and practice in the following fields:

(1) Increased understanding of the role of context, timing and actors in demand management programmes
The project aims to enhance the current understanding of drivers and barriers for behavioural change in demand management programmes by integrating new theory with new empirical evidence and by integrating researchers' knowledge with practitioners experiences. The model thus developed will be further tested in pilot projects and evaluated by the researchers, practitioners and stakeholders involved. The current understanding is thus:

- increased by dialogue between researchers and practitioners
- increased by analysing how demand management programmes interact with target groups, stakeholders and context
- increased by developing a theoretically rich but practical model of the socio-technical change involved in demand management programmes
- increased by validating the model through testing and practitioner feedback

(2) Increased understanding of why demand management programmes succeed or fail
Existing programmes have exhibited a range of more and less successful results in terms of energy demand reduction, but the reasons for success or failure are not fully understood. This proposal aims to explain the success and failure of demand management programmes in close interaction with the programme managers and relevant policy makers. The current understanding is thus:

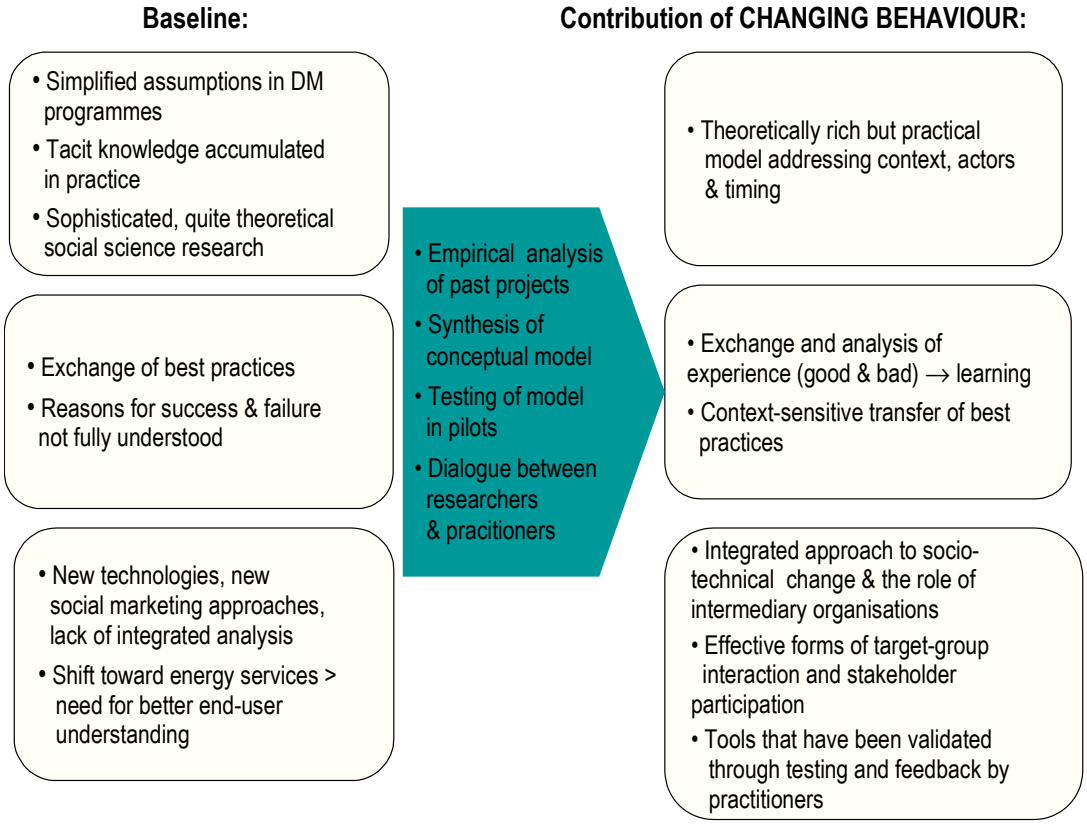
- increased by critically examining failure in addition to success
- increased by integration of cutting-edge social science research on the interaction between user behaviour and new technologies with empirical data and practical experiences in demand management
- increased by identifying central features of context that influence transferability of programmes from one context to another
- increased by testing the transfer of best practices through pilot projects and evaluating the experiences gained

(3) Tools for an integrated approach to the socio-technical change involved in demand management programmes
The project aims to create and disseminate an integrated approach that will enhance the way in which policy makers and demand management practitioners understand their target groups and the socio-technical factors influencing programme success. The project will contribute to these aims by:

- increasing the understanding of the roles and strategic capabilities of intermediary organisations in energy demand management

- improving intermediary organisations' knowledge management and sharing practices
- improving intermediary organisations' abilities to interact with target groups and stakeholders
- developing a Toolkit for and with practitioners
- developing a synthesis report for policy makers

The figure below summarizes the baseline and the contribution of the CHANGING BEHAVIOUR project.



Performance / research indicators

The research conducted in Changing Behaviour aims to enhance existing knowledge in general and in particular, to enhance existing 'knowledge-in-context'. Thus, we base our performance indicators on a number of different validation sources: (1) feedback and assessments by policy makers, practitioners and stakeholders interacting with the project (2) testing of the lessons in the pilot projects and (3) assessments by academic peers. The following performance indicators are used for the following targets. We use both qualitative (QL) and quantitative indicators (QN) to measure research performance.

(1) Increased understanding of the role of context, timing and actors in demand management programmes

- **QL:** New knowledge created by the project as compared to prior knowledge levels (as assessed by the intermediary organisations participating in the project workshops and discussion forums and Policy Board members involved)
- **QN:** Number of external parties making use of this knowledge (as measured by website visitors)
- **QN:** The degree of satisfaction of the stakeholders involved in the pilot projects (website stakeholder survey)
- **QN**: Recognition by academic researchers in the field (number of peer reviewed journal publications produced by the project)

(2) Increased understanding of why demand management programmes succeed or fail

- **QL:** New knowledge created by the project as compared to prior knowledge levels (as assessed by the intermediary organisations participating in the project workshops and discussion forums and Policy Board members involved)
- **QL & QN:** Successfulness of pilot projects developed on the basis of this model (as assessed through the self-evaluation, including both qualitative and quantitative measures)
- **QN**: Recognition by academic researchers in the field (number of peer reviewed journal publications produced by the project)

(3) Tools for an integrated approach to the socio-technical change involved in demand management programmes

- **QN:** The development of 8 to 10 indicators of key elements of successful energy demand management programmes
- **QN:** Number of intermediary organisations actively interacting in the project (workshops and website).
- **QN:** Dissemination of the toolkit and results of the project to at least 5 targeted stakeholders per participating country
- **QN:** Feedback on the Toolkit (as assessed by number of website visitors, registered users and website survey)

B1.3 Scientific methodology and associated work plan

Overall strategy

The overall strategy is based on intensive co-operation between researchers and practitioners. The *researchers' role* is to inventory, analyse and evaluate existing practices. They bring to this process their knowledge of recent theory, methods and tools in the analysis of socio-technical change, as well as a broad interdisciplinary knowledge base on the adoption of new energy technologies and behaviours. Their conceptual understanding helps to make explicit the tacit knowledge accumulated in previous programmes. They are also responsible for overall project management, documentation, and dissemination of the results beyond those involved in the project.

The practitioners bring to the process their prior experiences of demand management programmes, their tacit knowledge of what works and what does not, their knowledge of their operating environment and the practicalities of programme management. They also participate in summative and formative programme evaluation, the selection of best practices to be piloted, in the pilot projects, as well as in their evaluation. This work format enables a rapid dissemination of the research outcomes to their immediate beneficiaries, and facilitates a

dialogue between science and its users (ref. Science in Society Programme). The practitioners represent different types of demand management programmes (targeted at households, SMEs, buildings, ESCO projects) and different geographical regions; in the project, they will mobilise their networks and their knowledge of different contexts.

The policy makers bring to the process their extensive experience in enacting current policies and instruments and their knowledge of the needs and possibilities created by future policies. This will allow the project to place the programmes and practical policy implementation instruments in the context of broader European targets for energy efficiency and demand reduction policies.

The methodological basis of the project combines conventional policy and programme evaluation with a sophisticated understanding of models of social and technical change, in particular in the field of energy. The results of this analysis are then tested under real-life conditions in collaboration with the relevant actors, and the outcomes are reflected on together with those involved. This enhances the transmission of theoretical understanding into practice, and practical understanding and research-user needs into theory-development

In this, the project builds on a growing tradition for researchers of science, technology and society to engage in action research[7]. This type of research develops and tests theoretical concepts in real-world conditions in co-operation with real-world actors[8]. Through a close monitoring of processes and systematic reflection together with the actors involved, results are produced that are both theoretically valid and practically actionable.

Collaboration with intermediary organisations will be organised in two ways:

- Representatives of intermediary organisations are partners in the project
- Five (5) workshops will be organised to mobilise additional intermediary organisations to collaborate with the project, and contact will be maintained with the throughout the project.

The overall work plan consists of the following six work packages:

WP1	Inventory of European demand management programmes
WP2	Development of the conceptual model: success factors, underlying models of social and technical change, and methods of target group interaction
WP3	Researcher-practitioner dialogue with intermediary organisations
WP4	Context-tailoring and piloting of best practice programmes
WP5	Evaluation and Toolkit development
WP6	Management and dissemination

The purpose of these work packages is described below (more details in tables 1.3c, 1-6).

WP1 Inventory of European demand management programmes

The aim of the inventory is to identify the relevant demand management programmes and their operating contexts. An inventory will be made of demand management programmes

[7] See e.g., Hasu, M. & Miettinen, R. (2006). *Dialogue and Intervention in Science and Technology Studies: Whose Point of View?* Working Papers 35/2006. Center for Activity Theory and Developmental Work Research; Elzen B., Geels F. & Green K. (eds.) *System Innovation and the Transition to Sustainability: Theory, Evidence and Policy.* Edward Elgar; KSI (2005) Business plan: Knowledge Network for System Innovation. Online: http://www.ksinetwork.com;

[8] e.g., Tenkasi, R. & Hay, G. (2004) Actionable Knowledge and Scholar-Practitioners: A Process Model of Theory Practice Linkages. *Systemic Practice and Action Research* 17 (3): 117-206.

(concluded, ongoing and planned), and their relation to national energy efficiency, load management and demand reduction targets. The focus will be on different **contexts**: (a) different **countries** from West, North, South, Central and Eastern Europe and (b) different **local contexts** within countries (e.g., urban and rural). The focus will also be on demand management programmes run in **different sectors**: (a) SMEs (services, small industries), (b) built environment (houses, industrial and service complexes), (c) households. Moreover, the focus will be on **different kinds of target groups and stakeholders** of demand management programmes: (a) consumers, (b) SME owners, managers, employees and suppliers (c) architects, construction companies and their subcontractors, (d) facilities owners, managers and maintenance staff, (e) financial services (e.g., mortgage banks, ESCO financing), (f) municipalities. The programmes will be **examined within their institutional context**, including the supporting policy measures, features or the energy market and the markets in the relevant sectors, socio-economic and historical context, geographic and infrastructural aspects, cultural, educational and demographic features, among others.

Close contact will be established with ongoing meta-evaluation and information exchange programmes on a European level. Even though demand management in the transport sector or large energy-intensive industries are not the main focus of this project, a summary review of innovative programmes within these fields, as well as in the fields of other natural resources management (e.g., water demand management) will also be made in order to identify best practices and key lessons. Full use will be made of previous inventories and studies conducted, e.g., within the IEA DSM Programme, El-Tertiary, EnERLIn, EuroWhiteCert and STACCATO and the *Review of the Status of Energy Service Companies* These surveys will be complemented in terms of gaps (e.g., pertaining to less successful projects), New Member States and recent developments. The end product produced from this work package will be an inventory report of European demand management programmes as well as of the policy and institutional context in which they are implemented. This report will be made freely available online, and it will also be used to select programmes for closer analysis in WP2.

WP2 Development of the conceptual model: success factors, underlying models of social and technical change, and methods of target group interaction

The aim of Work Package 2 is to develop a conceptual model enabling an understanding of why demand management programmes succeed or fail. The model will enable an identification of improvement needs in the programmes' working models of social and technical change and they ways in which programmes interact with and learn about their target groups. A conceptual model of behavioural change and target group interaction in demand management programmes will be developed, making full use of recent progress in social studies of technology and human-technology interaction and, e.g., the theoretical insights developed in the Create Acceptance project. This will be done by first making a preliminary **identification** of 10-20 of the **best and worst practices** in earlier programmes on the basis of efficacy, effectiveness and learning criteria. An **analysis** of underlying factors explaining success or failure will be conducted, with a special focus on:

i. culture on the level of a country or region (historical attitudes, trust issues, institutional organisations, political culture i.e.) and culture on the individual level of people's specific positions and lifestyle (fatalist, optimist, hierarchic etcetera);
ii. gender aspects/ age issues/ demographic trends;
iii. strategies, capacity and capability for resistance
iv. level of knowledge/information; educational system; communication strategies
v. participation issues
vi. attitude towards outsiders
vii. risk and trust issues

viii. economic drivers and barriers;
ix. psychological issues;
x. sector (specific requirements and preferences (transport, energy, housing)
xi. general consumer behavior

The projects will be analysed on the basis of their underlying models of social and technical change and methods of target group knowledge management, using recent social research on technological change as a **theoretical framework**. This will be accomplished by analysing the kinds of assumptions about technology adoption and behavioural change that guided the project, as well as the means with which the project obtained knowledge about and interacted with its target group. Attention will also be devoted to the kinds of organisations involved in the programmes, with a special focus on the role of intermediary organisations. The programmes will also be analysed with respect to the demand reduction potentials identified in each sector, and the specific reduction potentials of programme target groups within the sector.

The analysis will be based on programme reports and statistics, including long-term statistical and documentary data on the continued impacts of early programmes. Moreover, interviews with programme managers and policy makers as well as key programme stakeholders will be conducted with respect to the programmes preliminarily deemed to be most and least successful. The preliminary **conceptual model** developed in this work package will be validated in dialogue with intermediary organisations in the workshops arranged WP3, and then finalised. The end products of this work package include (1) a database of the past 10 year of best and bad practice in demand management (2) an analysis report including an executive summary with highlights for policy makers and (3) a concise, thought-provoking synthesis of this report to be presented for the intermediary organisations participating in the workshops organised in WP3.

WP3 Researcher-practitioner dialogue with intermediary organisations

The aim of this work package is to initiate intensified interaction and co-operation of the project with intermediary organisations. The purpose of this interaction is to: **map the social organisation** of intermediaries in contexts of energy consumption; initiate **dialogue** between practitioner experience and academic research on social and technical change; **validate** the findings of the analysis conducted in WP2 (in particular in terms of relevance for intermediary organisations); **select projects** that could be successfully piloted in another location; and **identify**, in a joint work process, context-tailoring measures necessary for successful pilot transfers. The overall aim is to **accelerate** the exploitation of intermediaries in energy demand management through an enhanced understanding of context, actors and timing. Contact will be maintained throughout the project with the intermediary organisations mobilised in this work package via the project website, newsletter, e-mail and a final workshop (see WP5 and WP6).

The work package will start out by conceptualising the role of intermediaries in energy technology adoption and in the transformation of energy-related behaviour. It will map out the relevant intermediary organisations operating in the field of demand management in the participating EU countries, as well as their operating contexts and social organisation. The conceptualisation and mapping of intermediary organisations and ongoing and planned programmes will enable the selection of organisations to involve in work package 3, and the establishment of initial contacts with them. Dialogue will be mobilised by organising **four regional workshops** for intermediary organisations in different European countries. The intermediaries will be invited to comment on the WP2 synthesis report in two-day workshops, in which the first day will focus on discussion and refinement of the analysis, and the second

one on identifying successful projects and ones that are particularly interesting for context-tailoring and piloting at another site. The end products delivered by this work package include: (1) workshop reports from each workshop (2) a selection of best practices for piloting in WP4 and (3) a preliminary list of measures needed for tailoring programmes to context, which are then further tested in WP4.

WP4 Context-tailoring and piloting of best practices
The purpose of this work package is to test the conceptual model and context-tailoring measures developed in WP2 and WP3 by piloting best practices in a new context in co-operation with intermediary organisations. The pilots will be **designed** with due attention to the recognised contextual features and needs, and will be **tailored** as well as possible in order to be contextually appropriate. The pilots will enable a **testing** of the context-tailored conceptual mode, and of the designed localisation principles under real-world conditions. The work package will initiate and carry out 4-6 pilot projects in different countries, including New Member States. The pilots will be carefully selected to enable the testing of the conceptual model and the procedures for tailoring projects to context that it suggests. Thus, they can only be selected after the relevant stages in WP2 and WP3 have been completed. The intermediary organisations (practitioners) participating as project partners will be closely involved in the pilots, but also programmes involving other intermediary organisations can be included in the pilot selection. Both practitioners and researchers will participate in the pilot projects at all stages. The researchers will contribute to the design of the pilots, and be responsible for documenting and analysing the respective projects as well for collecting feedback from project stakeholders. The experiences gained will be carefully **documented and analysed** in order to evaluate the successfulness of the pilots and to identify key factors in successful programme transfer. The end products delivered by this work package include: (1) documentation of pilot projects, including design, implementation and context-tailoring measures (2) analysis of more and less successful features of pilot projects.

The pilot projects in work package 4 will be conducted by integrating the pilot project goals to existing or upcoming demand management plans on the national level. This will supply the additional resources required by the pilot projects. The integration to ongoing plans is facilitated by the inclusion of policy makers and government-level programme planners in the Policy Board on the project, and by informing these organisations of the planned work already when drafting this proposal. It is possible that other intermediary organisations than those featuring as partners in the present proposal will have the main responsibility for operating some of the pilot projects; in this case, the resources of the CHANGING BEHAVIOUR project will be utilised to assist in the design, monitoring, feedback collection and evaluation of those projects.

In case there are more intermediary organisations interested in applying the outcomes of the WP3 workshops and testing the context-tailoring approach in their own programmes than the resources of the programme enable to support, they will be encouraged to organise pilots on their own, and experiences from these external pilots will be collected using interviews or an e-mail questionnaire.

WP5 Developing a toolkit: Evaluation and documentation
At the end of the project, as well as continually, a self-evaluation will be conducted. This will involve both **systematic data collection** and **reflective analysis** by the research team, and targeted questions for the practitioners involved. Moreover, the **evaluation** will make use of feedback from programme stakeholders. The evaluation, as well as a summary of findings from each work package, will be included in a separate deliverable. Feedback for the

evaluation process will be collected in a number of ways. Interviews will be done with programme managers, and participation rates, costs and impacts will be recorded as closely as possible. Feedback from programme stakeholders will be obtained using an Internet-based questionnaire, and this will be complemented with personal interviews where necessary. One project workshop together with Policy Board members will be devoted to analysis and reflection on the evaluation indicators and feedback measures obtained. This evaluation process as well as its implications for the conceptual change model will be documented and used to derive the final list of 8-10 key indicators of successful energy demand programme management. The evaluation will also provide the necessary information for concluding the final report of the project.

The outcomes will also be used for **designing** a highly usable Toolkit for Practitioners. This toolkit will include:

i. A summary of the principles and processes of socially, technically and contextually sensitive programme design
ii. Stimulating examples
iii. A checklist of key pitfalls and success factors
iv. Procedures for successful context-tailoring of programmes, including highlights of necessary target group knowledge and participation, and suggestions for appropriate procedures

The detailed format and content of the toolkit will be **designed in co-operation** with the intermediary organisations involved, and **tested with users** in a final workshop for intermediaries. Particular attention will be devoted to developing a user-friendly format and targeting both format and contents to the appropriate user groups (different types of intermediary organisations, policy-level programme planners). The Toolkit will be made freely available online over the Internet and translations will be undertaken into at least two languages.

Specifications of the toolkit

Because the content and the format of the Toolkit will be specified in more detail during the Changing Behaviour project, the specifications are subject to change as we learn more about user requirements. We, however, envisage the following specifications:

- Freely available over the Internet
- Designed using open software tools
- Translated into different (at least two?) languages in addition to English, option for users to make their own translations and link them to the Changing Behaviour website
- With a printer-friendly layout available, possibly also published in print booklet format
- Available for organizations to download and customize into their own internal manual (e.g., by adding their own guidelines, procedures and logos).

The toolkit will be designed in close collaboration with users. The participating organizations, in particular NCRC, have extensive experience in cost-effective user-inclusive design processes. User input into the Tookit design process will be obtained in the following ways:

1. The four regional workshops for intermediary organizations (part of WP3) will include a specific session focusing on the Toolkit. The purpose of these sessions is to elicit user requirements for the toolkit (contents, format, language, etc.) and engage users in idea generation. Possible techniques for rapid requirements elicitation include quality function deployment (QFD) and the accelerated requirements method (ARM).

Idea generation can be organized via brainstorming or via an idea competition, for example.

2. Practitioner-partners will represent users throughout the toolkit design process (WP5) by commenting on first drafts, structure, cases, illustrations, format, language and other design solutions. It is also possible to organize a brainstorm at one of the project meetings.
3. Input to the Toolkit will be invited from Policy Board members at the meeting in month 32/33.
4. Input on the draft Toolkit will be invited in (a) a designated workshop to be organized in month 34, as well as (b) over the web in the months surrounding this workshop.

All user input will be closely analysed and utilized in the development of the Toolkit. User friendliness and user requirements are the main guidelines for development. Moreover, the design of our project enables the use of a broad range of ideas in supplements to the Toolkit, e.g., the Open Innovation Platform, tailored versions of the Toolkit, etc. All user input will thus be closely recorded and integrated as far as possible.

The Toolkit does not require new software development or programming. It can be based on existing web publishing tools such as WordPress and Joomla. Thus, the technical development of the tool can be done in-house at the National Consumer Research Centre, which has extensive experience of the development of web-based guides, interactive project websites and discussion forums[9].

ECN will be responsible for the contents of the Toolkit and NCRC will be responsible for the technical execution (web design, web execution and administration). At the NCRC, Research Manager Petteri Repo has extensive experience in the development of user-friendly web-based information tools. Moreover, the NCRC staff will be complemented by a usability engineer in October 2007. The Toolkit will be maintained on the NCRC server.

Flexibility and adaptability of the the Toolkit will be ensured by providing the following versions:

1. Core Toolkit content
2. Supplementary content: case studies and examples
3. Localized and different language versions of the toolkit
4. Customizable version that organizations can download and tailor to their own needs

The Toolkit will be freely available over the Internet. Users will be invited to register, and registration will be a condition for downloading of the customizable version and participation in the user community site. The customizable version is provided on terms and conditions similar to the Creative Commons "Attribution Share Alike" (by-sa) license or to GPL or BSD software licenses. This means that *users can build on the Toolkit* and even use it commercially, as long as they credit the original work and license the new creations under identical terms.

[9] For example, a toolbok for user-oriented design (http://www.juuseri.net, in Finnish), a web forum for user-oriented design (http://www.onniblogi.net, mostly in Finnish), a web forum for Corporate Social Responsibility (http://blogit.kuluttajatutkimus.fi/vastuu/, in Finnish), and a discussion forum for consumer-oriented Web2.0 (http://www.omasana.fi/kuluttaja2, in Finnish).

Wide adoption of the Tookit will be promoted by disseminating it to at least 5 users in each participating country. Conditions for interest in the Toolkit will be good at this point, as a total of 100 intermediary organizations participating in the workshops will be aware of it at this point, and many will have participated in its development by providing input. Dissemination will be enhanced by presenting the Toolkit at various events (presentations and demos) as well as by targeting a broad group of users using the e-mail newsfeed.

WP6 Management and dissemination

The coordinator will carry out the day-to-day management of the project, coordination between the project partners, ensure the circulation of important documents, and promote meetings and discussions. Work package leaders should inform the coordinator of the ongoing status of the work packages whenever requested. The coordinator will be responsible for communications with the EC. The coordinator will organise the kick-off meeting and officially nominate the steering committee. The coordinator will convene the steering committee for bilateral meetings and hold multilateral meetings whenever considered adequate, namely at the semester meetings. The coordinator will be responsible for writing up all the reports, with the input of all the work package leaders. The final report will have broader dissemination and will circulate among partners prior to dissemination outside the consortium. The coordinator will ensure the final report results from a consensus among all partners. This work package will include: (a) A periodic and a final report (b) Project meetings including an Open Forum during the final meeting, (c) Regular meetings with the Policy Board and (d) Project Workshops for partners. The workshops will offer an important opportunity for discussion among the partners of the main issues under consideration in the project, for designing key research and interaction steps, and for supporting the self-evaluation.

Moreover, this work package includes (e) Setting up and administration of the interactive project website, including a related **Open Innovation Platform** for exchange of experiences and collaborative online development of innovative programmes together with programme stakeholders. The coordinator will also be responsible for setting up the interactive project website and facilitating dialogue on the website. This website will serve as a forum for ongoing interaction between the project team, the intermediary organisations and a range of programme stakeholders throughout the duration of the project. The website will complement and augment the face-to-face interaction occurring throughout the project, as well as provide a means to collect feedback and develop and improve programme concepts. Contact with the intermediary organisations will also be maintained throughout the project via a mailing list and a regular newsfeed on the project.

Detailed work description

The overall work plan of the project consists of six work packages, which are presented in Table 1.3a and Figure 1.2. Tables 1.3c (1-6) provide details on the work package tasks.

The deliverables produced by the project are listed in table 1.3 b below. A summary of staff effort is given in Table 1.3d. A list of the milestones of the project is presented in Table 1.3e.

Table 1.3a. Work package list

Work package No	Work package title	Type of activity	Lead participant no	Lead participant short name	person months	start month	end month
WP1	Inventory of European demand management programmes	RTD	Central European University	CEU	17	1	12
WP2	Development of the conceptual model: analysis of success factors, models an methods of target group interaction	RTD	Energy research Centre of the Netherlands	ECN	51	4	30
WP3	Researcher-practitioner dialogue with intermediary organisations	RTD	SURF Centre, University of Salford	SURF	69	3	30
WP4	Context-tailoring and piloting of best practice programmes	RTD	Oeko-Institut	OEKO	80	10	32
WP5	Evaluation and Tookit development	RTD	Energy research Centre of the Netherlands	ECN	55	20	36
WP6	Project management and dissemination	RTD	National Consumer Research Centre	NCRC	26	1	36
	TOTAL				298		

Work packages 1 and 2 form the foundation of the project. They are research activities that form the empirical and theoretical basis for developing better practice in work packages 3 and 4. They are closely interlinked so that work package 1 focuses on collecting a comprehensive empirical database and work package 2 on analysis of the empirical material (resulting in a consolidated database of best and worst practices) and development of the conceptual model that informs all later stages of the project. Due to the nature of the work, the participating researchers have a larger role in this work package, whereas practitioners will contribute by supplying project and contextual information and specific local knowledge, by validating interim steps in the process, and by contributing insights for the conceptual analysis from their own practical experience.

Work package 3 is at the centre of the project, because it involves the mobilisation of a broad group of intermediary organisations into an ongoing dialogue process. This dialogue serves multiple purposes: enhanced understanding of the roles, possibilities and knowledge needs of intermediary organisations; validation of the analysis and conceptual model developed in work package 2, selection of best practices and identification of measures needed to tailor them to context. In order to attract a broad range of intermediary organisations, the networks of the practitioners who are partners in this project are crucial, as well as their experience of workshop formats and procedures that are suitable for intermediary organisations. Researchers will have an important role in designing the overall dialogue format and the material to be discussed and worked on, as well as in making a close analysis of all results of

the dialogue process. All partners will participate in designing, organising, carrying out and documenting the workshops. Work package three will help to select the pilot programmes for testing in work package 4, and will also hopefully stimulate a wider group of intermediary organisations to try out the models and concepts developed on their own.

Work package 4 will involve the piloting of 4-6 context-tailored best practice programmes in different countries. In this work, the practitioner-partners will have a central role. They will either be programme managers for the one of the pilots, or provide assistance in programme design, implementation and documentation of a pilot. The researchers' role will be to design the overall piloting format, monitoring, collect and analysis of experiences and feedback, and documenting of the results of the pilots. Work package 5 aims to document the entire experiences of the project and the lessons learned in formats that are suitable for their target groups. The development of the Toolkit, in particular, will benefit from both the experiences of researchers and practitioners.

Resources for dissemination of the results in work package 6 are allocated to all partners, even though the coordinator has the main responsibility for ensuring dissemination and for setting up and administering the project website including discussion forum, questionnaires and Open Innovation Platform. Dissemination is very important for this project, which aims to enhance current practice to a new level of understanding. For this purpose, all the networks of all partners are very important.

The timing of the work packages and their components is illustrated in the Gantt chart on the following page. The components of the project and their interdependencies are presented in Figure 1.2.

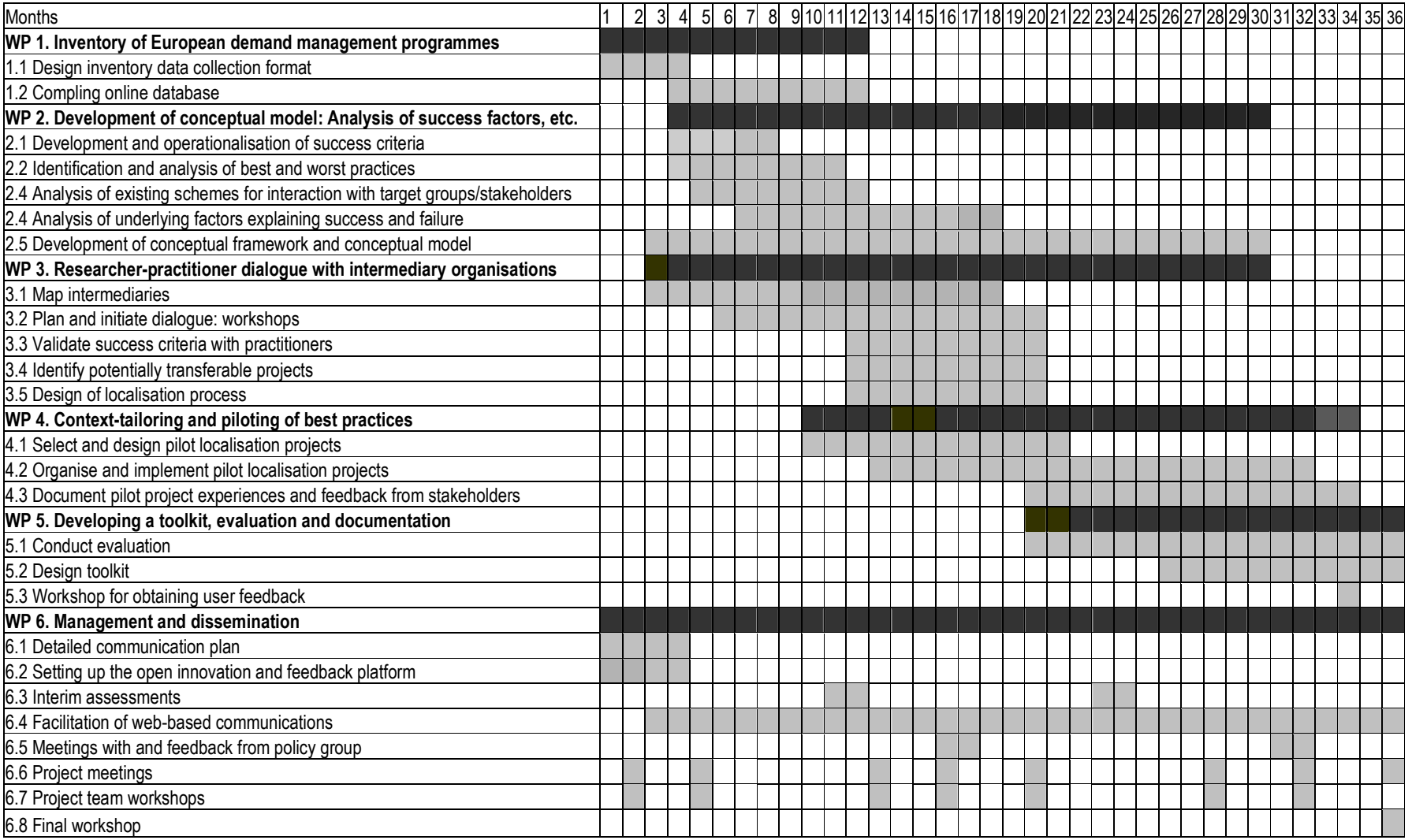
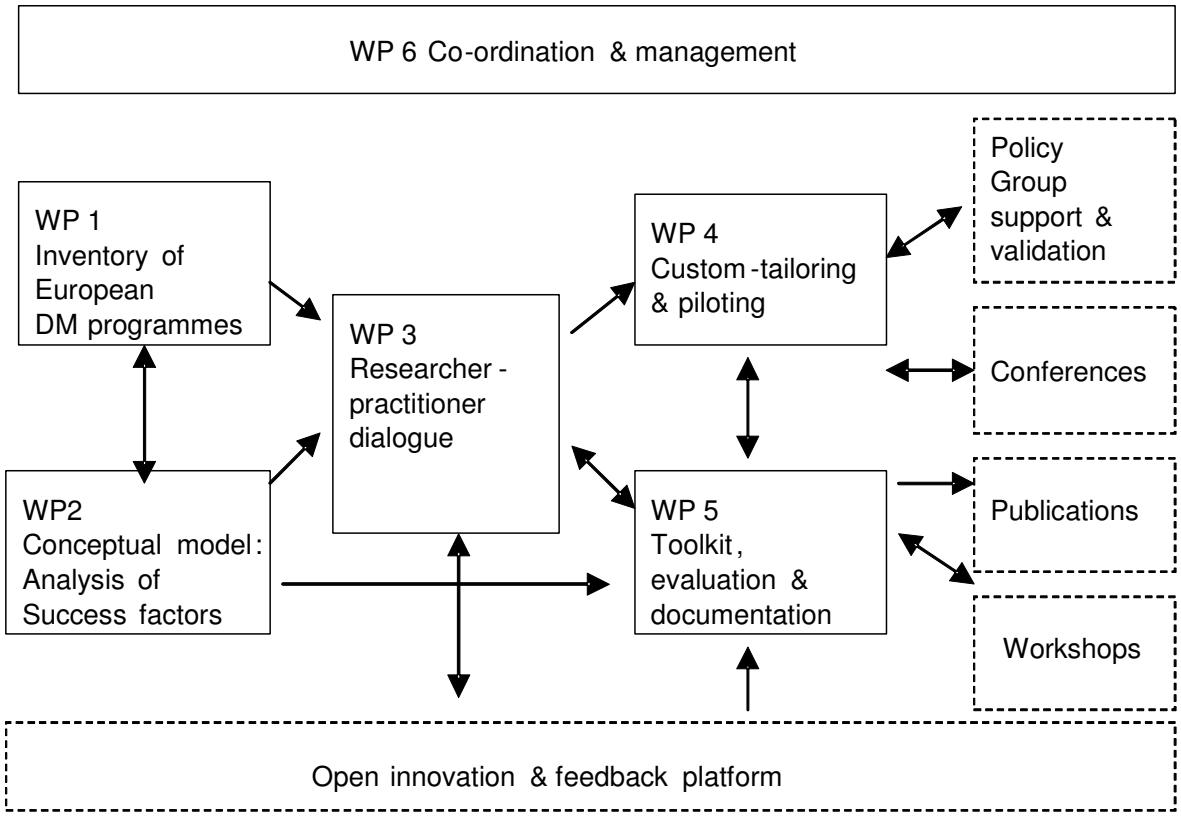

Months
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36
WP 1. Inventory of European demand management programmes
1.1 Design inventory data collection format
1.2 Compling online database
WP 2. Development of conceptual model: Analysis of success factors, etc.
2.1 Development and operationalisation of success criteria
2.2 Identification and analysis of best and worst practices
2.4 Analysis of existing schemes for interaction with target groups/stakeholders
2.4 Analysis of underlying factors explaining success and failure
2.5 Development of conceptual framework and conceptual model
WP 3. Researcher-practitioner dialogue with intermediary organisations
3.1 Map intermediaries
3.2 Plan and initiate dialogue: workshops
3.3 Validate success criteria with practitioners
3.4 Identify potentially transferable projects
3.5 Design of localisation process
WP 4. Context-tailoring and piloting of best practices
4.1 Select and design pilot localisation projects
4.2 Organise and implement pilot localisation projects
4.3 Document pilot project experiences and feedback from stakeholders
WP 5. Developing a toolkit, evaluation and documentation
5.1 Conduct evaluation
5.2 Design toolkit
5.3 Workshop for obtaining user feedback
WP 6. Management and dissemination
6.1 Detailed communication plan
6.2 Setting up the open innovation and feedback platform
6.3 Interim assessments
6.4 Facilitation of web-based communications
6.5 Meetings with and feedback from policy group
6.6 Project meetings
6.7 Project team workshops
6.8 Final workshop

Figure 1.2.The components of the project and their interdependencies



Specification of deliverables

The following are the major, published deliverables of the project for different audiences:

D1 Inventory database of European demand management programmes targeted at SMEs (services, small industry), the building sector and households and their results.
The added value of this deliverable: According to the knowledge of the project partners, there is no up-to-date encompassing database of European demand management programmes. Existing databases (e.g., IEA DSM) do not include much information on programmes in New Member States. Moreover, existing databases are biased toward successful programmes, and include little information on less successful ones.

The inventory database is also an important first publication of the project, which will attract attention among policy makers and intermediaries operating in the field. This is because of its unprecedented scope and because it allows comparison of results. It will be disseminated widely, and will be important in starting a discussion among stakeholders about the subject matter of CHANGING BEHAVIOUR.

Specifications of this deliverable:
- Publicly available
- Web-based
- Searchable
- Comprehensive scope (including New Member States, more and less successful projects, SMEs municipalities, households, residential sector)
- Allows comparison of programme inputs, instruments and results by country and by sector (target group)
- Useful for policy makers and practitioners
- Independent report that also serves as input for WP2
- Fully upgradeable and expandable

D4 Past 10 year of best and bad practices in demand management: Report on factors explaining success and failure
Added value of this deliverable: The report will identify previous projects that have been notably successful or unsuccessful, based on efficacy, effectiveness and learning criteria. The analysis will be based on programme reports and statistics, including long-term statistical and documentary data on the continued impacts of early projects. Interviews with programme managers and policy makers will serve to further uncover the efficacy and effectiveness of the selected projects, as well as lessons learned on the basis of the programmes. Moreover, this deliverable will make an in-depth analysis of causes for success and failure, with a special focus on the role of context, timing and actors. In addition to examples, it also includes analysis and conclusions to be drawn on the basis of past successes and failures.

Specifications of this deliverable
- Publicly available web publication
- Analysis of best and worst examples
- Special focus on context, timing and actors
- Including analysis of and conclusions on the causes for success and failure
- Useful for policy makers and practitioners

- Independent report that also serves as input for WP3

D5 Report on schemes for interaction explaining success and failure of their impact on demand management

Added value of this deliverable: This deliverable will focus in particular in the forms of target group and stakeholder participation and in their impact on the success and failure of demand management programmes. Participation and interaction schemes (e.g., surveys, field observations, direct stakeholder interaction, stakeholder participation in programme design), will be classified, and their impact on success and failure will be analysed. The report will produce recommendations on suitable forms of target group interaction in different contexts.

Specifications of this deliverable

- Publicly available web publication
- Analysis of participation and stakeholder interaction schemes
- Including analysis of and conclusions on impacts on success and failure
- Including recommendations
- Useful for practitioners and policy makers
- Independent report that also serves as input for WP3

D6 Conceptual framework and model: Synthesis report tailored for policy makers as target group

Added value of this deliverable: This deliverable, targeted for policy makers, consolidates the main conclusions of the analysis undertaken in WP2. It presents the conceptual framework and model developed in WP2 in an easily accessible format. In this way, it serves to highlight issues that policy makers should pay more attention to when designing demand management programmes, as well as well as the main factors influencing the possibilities to transfer programmes from one context to another.

Specifications of this deliverable

- Publicly available
- Web publication (print also possible if desired by Policy Board)
- Synthesis of the conceptual framework and model developed in the project
- Targeted for policy makers in terms of language and presentation format
- Main conclusion of analysis undertaken in WP2
- Independent report that also serves as input for WP3

D7 Report: Conceptualizing and understanding intermediaries in context

Added value of this deliverable: There are many different kinds of intermediary organisations that potentially play an important role in energy conservation, energy efficiency and demand side management (e.g., energy agencies, consultancies, ESCO companies). Many other intermediary organisations are also active in the field under a broader 'sustainability' umbrella, e.g., launching 'green office' or 'green building' programmes or providing consumer advice. Intermediary organisations can have an important role to play in mediating between energy consumption, energy production and energy policy. The report conceptualises these different roles and the strategic capabilities needed by intermediary organisations.

Specifications of this deliverable

- Publicly available web publication
- Includes classification of different kinds of intermediary organisations
- Analyses different roles of intermediary organisations in different (institutional, geographical and market) contexts
- Identifies strategic capabilities needed by intermediary organisations
- Independent report that can be used by policy makers to identify and understand the role of intermediaries
- Serves also as a conceptual framework for targeting intermediaries to be invited to the workshops (WP3)
- Serves also as a conceptual framework for the intermediaries invited to the workshop in WP3 (provides basis for introducing the focus of the workshops)

D9: Four (4) workshops to validate model, identify best practices and select pilots: Workshop reports

Added value of this deliverable**:** The workshops are a key tool for the project to interact with the wider community of intermediary organisations. The intermediaries will be invited to comment on the WP2 synthesis report in two-day workshops, in which the first day will focus on discussion and refinement of the analysis, and the second one on identifying successful projects and ones that are particularly interesting for context-tailoring and piloting at another site. The workshops are also useful for the participating intermediary organisations, as they provide an opportunity to learn about the conceptual model and share knowledge gained through their experiences in interacting with target groups and stakeholders.

Specification of this deliverable:

- Workshops organised in 4 different European countries (regional centres, e.g., Estonia, Hungary, Germany/UK, Greece)
- Part of the workshops conducted in national languages
- Two-day workshops focusing on validating the conceptual model, identifying best practices, identifying context-tailoring needs
- Supported by web information and discussion forum (also for those not able to attend)
- Provide input for WP4 through a selection of best practices for piloting and a preliminary list of measures needed for tailoring programmes to context
- Provide input for WP5 by eliciting user requirements for the Toolkit
- Independent events stimulating dialogue and knowledge-sharing
- Independent web publications: publicly available workshop reports

D12: Pilot projects: Documentation of initial implementation experiences including stakeholder feedback

Added value of this deliverable**:** This report documents the experiences gained in the pilot programmes designed for testing of the conceptual model and the procedures for tailoring projects to context that it suggests. It will provide detailed information on the design, implementation and context-tailoring measures used in the programmes. It will also include an analysis of their more and less successful features from the perspectives of the practitioners, programme stakeholders and the researchers.

Specifications of this deliverable

- Publicly available web publication
- Describes the implementation of innovative projects in a new context
- Analyses success and failure in implementation
- Useful for policy makers and practitioners
- Provides input for further refinement of the conceptual model, for the self-evaluation and for the development of the Toolkit

D13: Report on the self-evaluation

Added value of this deliverable: The report summarises the main lessons learned through the project. It is based on both systematic data collection and reflective analysis by the research team, targeted questions for the practitioners involved and feedback from programme stakeholders. One project workshop together with Policy Board members will be devoted to analysis and reflection on the evaluation indicators and feedback measures obtained. This evaluation concludes with a list of 8-10 key indicators of successful energy demand programme management.

Specifications of this deliverable:

- Publicly available web publication
- Summarizes the main lessons learned in an objective manner
- Includes list of 8-10 key indicators of successful energy demand programme management
- Useful for policy makers
- Also provide the necessary information for concluding the final report of the project

D14: Toolkit for practitioners

Added value of this deliverable: The Toolkit is one of the main outputs of the project. It is targeted for practitioners/intermediary organisations. This toolkit will include (a) a summary of the principles and processes of socially, technically and contextually sensitive programme design (b) stimulating examples (c) a checklist of key pitfalls and success factors (d) a guide for successful context-tailoring of programmes, including highlights of necessary target group knowledge and participation, and suggestions for appropriate procedures. Its content, design and format will be developed together with users to ensure maximum user-friendliness, flexibility, adaptability and wide adoption. The Toolkit will be disseminated to at least 5 potential users in each country. Because it is created in close collaboration with users, it is likely to attract their attention and gain a wide user community.

Specifications of this deliverable:

- Freely available over the Internet (registration required for user forum and downloading of the customizable version)
- Designed end executed using open software tools
- Translated/localized into different languages/national contexts
- Option for users to make their own translations and link them to the Changing Behaviour website
- With a printer-friendly layout available, possibly also published in print booklet format
- Available for organizations to download and customize into their own internal manual

D15: Interactive project website and Open Innovation Platform

Added value of this deliverable: The main audience of this deliverable are intermediary organisations everywhere in Europe. This deliverable will stimulate interaction and knowledge sharing and also serve as a repository for new ideas and innovative programme designs developed by the community of intermediary organisations. The interactive website will enable the intermediary organisations mobilised by the project to interact with the project partners and each other, and share and develop new knowledge. Partners will actively host the website and stimulate discussion, as well as invite external experts to contribute to the website. The Open Innovation Platform will provide users the possibility to comment on existing demand management programme formats, suggest improvements, suggest new programme formats, and elaborate on new ideas together with other users.

Specifications of this deliverable:

- Freely accessible, moderated by project partners
- Complements face-to-face interaction at workshops
- Designed and executed using open software tools
- Adhering to open source principles: users can freely use and modify content, new ideas and improvements are shared with the community
- Forum for knowledge sharing, repository of innovative programme designs developed by the community

Along with these publicly available reports for different audiences, the project will also produce a number of internal reports (D2; D3, D8; D10; D11), the Plan for the User and Dissemination of Foreground (D16), progress reports, (D17-D20) and a Final Report (D21). Moreover, the results of the project will be published in peer reviewed journal articles, conference proceedings and practitioner journals (see section 3.2, dissemination plan).

Table 1.3b: Deliverables List

Del.no.	Deliverable name	WP no.	Na-ture	Dis-semi-nation level	Deli-very date (month)
D1	Inventory database of European demand management programmes targeted at SMEs (services, small industry), the building sector and households and their results.	1	R	PU	13
D2	Summary database of the past 10 year of best and bad practices in demand management	2	R	RE	19
D3	Conceptual approach of the project: background paper	2	R	RE	9
D4	Past 10 year of best and bad practices in demand management: Report on factors explaining success and failure	2	R	PU	19
D5	Report on schemes for interaction explaining success and failure of their impact on demand management	2	R	PU	19
D6	Conceptual framework and model: Synthesis report tailored for policy makers as target group	2	R	PU	19
D7	Report: Conceptualizing and understanding intermediaries in context	3	R	PU	19
D8	Identification of intermediary practices across countries for assessing piloting.	3	R	RE	11
D9	3 workshops to validate model, identify best practices and select pilots: Workshop reports	3	R	PU	22
D10	Preliminary list of context-tailoring measures	3	R	RE	20
D11	Overview of selected pilot projects, their design and localisation measures applied	4	R	RE	19
D12	Pilot projects: Documentation of initial implementation experiences including stakeholder feedback	4	R	PU	35
D13	Report on the self-evaluation	5	R	PU	36
D14	Toolkit for practitioners	5	R	PU	36
D15	Interactive project website and Open Innovation Platform, administration of online questionnaires	6	O	PU	2
D16	Plan for the Use and Dissemination of Foreground	6	R	RE	6
D17	First progress report	6	R	RE	6
D18	Second progress report	6	R	RE	12
D19	Third progress report	6	R	RE	18
D20	Fourth progress report	6	R	RE	24
D21	Fifth progress report	6	R	RE	30
D22	Final report	6	R	PU	36

Table 1.3c (1) – WP description

Work package number	WP1	Start date or starting event	Month 1

Work package leader: CEU

Work package title: **Inventory of European demand management programmes**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	MKC	En-espa	Green Dependent	Eko-doma	VZ NRW	Total
Person-months per participant	0,5	1	0,5	1	9	1	1	0,5	0,5	0,5	1	0,5	**17**

Objectives

The aim of the inventory is to identify the relevant European demand management programmes, their operating contexts, and the results achieved.

Description of work (for more details, see p. 12)

An inventory will be made of demand management programmes (concluded, ongoing and planned), and their relation to national energy efficiency and demand reduction targets. Key project characteristics and outcomes will be recorded in a publicly available, searchable database.

CEU will be work package leader for WP1. Partners will contribute by participating in the data collection format design, data collection and database format design. CEU will be responsible for the database format design and the technical execution, as well as for designing the data collection format and entering data. One partner from each country will contribute by collecting information from different national contexts, as well as information on different types of programmes (e.g., ESCO, building, SME, consumer). All partners will contribute by participating in the detailed design of the database and by testing the database before publication.

Task 1.1 Design inventory data collection format

Designing the inventory data collection format, i.e., scope of inventory, data sources to be used, project characteristics and outcomes to be recorded.

Task 1.2 Compiling online database

Compiling an online publicly available and searchable database of European demand management programmes targeted at SMEs (services, small industry), the building sector and households.

Deliverables

D1 Inventory database of European demand management programmes targeted at SMEs (services, small industry), the building sector and households and their results. Delivery date: month 13.

Table 1.3c (2) – WP description

Work package number	WP2	Start date or starting event	Month 4

Work package leader: ECN

Work package title: **Development of the conceptual model: Analysis of success factors, underlying models and methods in target group interaction**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green Depen-dent	Eko-doma	VZ NRW	Total
Person-months per participant	8	11	7	7	6	1	2	2	2	2	1,5	1,5	**51**

Objectives: the aim of this work package is to analyse underlying factors explaining the success and failure of demand management programmes, identify improvement needs in existing models used and analyse existing interaction schemes between demand management programmes and their target groups

Description of work (for more details, see p. 12-13)

ECN will be work package leader for WP2. Partners (in particular, NCRC, SURF and OEKO) will contribute by participating in the development of the conceptual model, programme evaluation criteria, identification and analysis of best and worst practices, analysis of underlying assumptions and interaction schemes, factors explaining success and development of the conceptual framework. Other partners contribute their specific knowledge of different types of programmes and contexts, by collecting additional data on targeted programmes, as well as by validating interpretations and conclusions.

Task 2.1 Development and operationalisation of success criteria
Development and operationalisation of criteria for programme evaluation.

Task 2.2: Identification and analysis of best and worst practices
Identification and analysis of best and worst practices in previous programmes will be done on the basis of efficacy, effectiveness (impact) and learning criteria. Analysis of the role of predetermined assumptions about technology adoption and behaviour change that guided the project.

Task 2.3: Analysis of existing schemes for interaction with target groups/stakeholders
Analysis of existing schemes for interaction between the demand management programme and its target group on the basis of their effectiveness (impact)

Task 2.4: **Analysis of underlying factors explaining success and failure**
Analysis of underlying factors explaining the success and failure of demand management programmes with special focus on culture (on national, regional, organisational and individual level); gender, demographic and age issues; level of knowledge, communication strategies and the educational system, possibilities for participation; attitude towards consumption and towards outsiders; risk and trust issues; capacity, capability and strategies for resistance; economic drivers and barriers; psychological issues.

Task 2.5 Development of conceptual framework and conceptual model
Development of conceptual framework and context-tailored conceptual model.

Deliverables
D 2: Summary database of the past 10 years of best and bad practices in demand management. Delivery date: Month 19.
D 3: Conceptual approach of the project: background paper. Delivery date: Month 9.
D 4: Report on underlying factors explaining success and failure of demand management. Delivery date: Month 19.
D 4: Report on schemes for interaction explaining success and failure of their impact on demand management. Delivery date: Month 19.
D 6: Conceptual framework and model: Synthesis report tailored for policy makers as target group.

Delivery date: Month 19.

Table 1.3c (3) **WP description**

Work package number	WP3	Start date or starting event	Month 3

Work package leader: SURF

Work package title: **Research-Practitioner dialogue with intermediary organisations**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green Depen-dent	Eko-doma	VZ NRW	CRES	Total
Person-months per participant	8	4	10	6	6	8	3,5	3,5	3,5	3,5	3,5	3,5	5	**68**

Objectives:
The objective of the work package is to accelerate the active and transformational role of intermediaries in energy demand through developing an enhanced understanding of context, actors and transferability.

Description of work (for more details, see p. 13-14)
SURF will be work package leader for WP3. All partners will participate in organising the workshops; this is absolutely necessary to ensure that different kinds of intermediaries are engaged and to enable the production of workshop sessions in different languages. In particular, SEI-T and CEU will contribute to planning workshops in New Member States and NCRC will contribute to overall workshop design. CRES will organise a special workshop for intermediaries in South Europe.

Based on a critical assessment of relevant literature, the inventory (WP1) and the analysis of success factors (WP2), accelerating the dialogue between researchers and the intermediary organizations will take place in the following direction:

Task 3.1: **Mapping intermediaries:**
Mapping the social and technical organization of energy intermediaries in the different local contexts.

Task 3.2: Initiate Dialogue
With partner intermediaries, build a dialogue and engagement focused on exploring the relations between practitioner experience and academic research perspectives on socio-technical change. Arrange 3 regional workshops for the broader intermediary community and their stakeholders.

Task 3.3: **Validate Findings**
In dialogue with intermediaries, discuss and refine key aspects of the conceptual model developed in WP2.

Task 3.4: Identify Projects
Identify the relevant projects in different contexts that are potentially transferable to other local contexts.

Task 3.5 Localization Process
Identify in joint work process involving workshops with the intermediary, custom-tailoring measures necessary for successful project transfer.

Deliverables
D7: Report: Conceptualizing and understanding intermediaries in context (3.1,3.2, 3.3). Delivery date: Month 19.
D8: Identification of intermediary practices across countries for assessing piloting. Delivery date: Month 11.
D9: 3 workshops to identify localization measures and process: workshop reports. Delivery date: Month 22.
D10: Preliminary list of context-tailoring measures: Delivery date: Month 20.

Table 1.3c (4) **WP description**

Work package number	WP4	Start date or starting event	Month 10

Work package leader: OEKO

Work package title: **WP4 Context-tailoring and piloting of best practices**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green Depen-dent	Eko-dom a	VZ NRW	Total
Person-months per participant	4	4	4	10	5	5	8	8	8	8	8	8	**80**

Objectives: The purpose of this work package is to pilot best practices in a new context in co-operation with intermediary organisations. The work package will initiate and carry out 4-6 different pilot projects in different countries.

Description of work (for more details, see p. 14-15)

OEKO will be work package leader for WP4. Cowi Baltic, Enespa, MKC, GreenDependent, Ekodoma and VZ NRW will participate actively in organising the pilots, whereas CEU, SEI-T, ECN, SURF and NCRC will participate in the design of the pilots and the context-tailoring measures, in collecting feedback and in documenting pilot project experiences.

The pilots will be designed with due attention to the recognised contextual features and needs, and will be localised as well as possible in order to be contextually appropriate. The pilots will enable a testing of the context-tailored conceptual model, and of the designed localisation principles under real-world conditions.

Task 4.1 Select and design pilot localisation projects:
Appropriate projects will be selected and designed together with the relevant intermediary organisations and their stakeholders. The design of the projects will take into account contextual features and needs on the basis of information received from the programme managers and their stakeholders.

Task 4.2 Organise and implement pilot localisation projects
Practitioners (intermediary organisations) will bear the primary responsibility for managing the pilot projects, researchers and the rest of the project team will provide support in the organisation and implementation.

Task 4.3 Document pilot project experiences and feedback from stakeholders
Using observation, interviews and a feedback questionnaire for programme stakeholders, experiences gained from the pilot project will be compiled, analysed and documented.

Deliverables

D 11 Overview of selected pilot projects, their design and localisation measures applied. Delivery date: Month 19.

D 12 Documentation of initial implementation experiences, including stakeholder feedback. Delivery date: Month 35.

Table 1.3c (5) – WP description

Work package number	WP5	Start date or starting event	Month 20

Work package leader: ECN

Work package title: **Evaluation and Toolkit development**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green Depen-dent	Eko-doma	VZ NRW	CRES	Total
Person-months per participant	9	10	7	5	4	3	2	2	2	2	2	2	5	**55**

Objectives: The purpose of this work package is to document and evaluate the experiences gained in the pilots as well as throughout the project, and integrate the key lessons learned into a highly usable Toolkit for practitioners.

Description of work (for more details, see p. 15)

ECN will be work package leader for WP5. All partners have an important role in analysing feedback and experiences collected for the self-evaluation. The toolkit will be developed in collaboration by all partners. NCRC and SURF will contribute in particular to collection of user feedback on the draft toolkit. NCRC will be responsible for the web design and execution of the toolkit and the different versions. Partners will be responsible for localising different versions of the core content of the toolkit.

Task 5.1: Conduct evaluation

During the continuation of the project a self-evaluation will be conducted. This will involve both systematic data collection and reflective analysis by the research team, and targeted questions for the practitioners involved. The evaluation, as well as a summary of findings from each work package, will be included in a separate deliverable.

Task 5.2: Design Toolkit

Designing a highly usable Toolkit for Practitioners. This toolkit will include a summary of the principles and process of social and technically and contextually sensitive programme design, stimulating examples, and a checklist of key pitfalls and success factors. The detailed format and content of the toolkit will be designed in co-operation with the intermediary organisations involved.

Task 5.3: **Workshop for obtaining user feedback**

A workshop will be organised for obtaining user feedback on the draft toolkit from intermediary organisations, and the feedback gained will be used to finalise the Toolkit.

Deliverables

D13: Report on the self-evaluation. Delivery date: Month 36.

D14: Toolkit for practitioners, with basic information on social and technical change, target group behavioural change and contextual sensitivity that programme managers need, illustrated by case studies of more and less successful programmes, key bottlenecks, procedures for successful localisation of programmes, including highlights of necessary target group knowledge and participation, and suggestions for appropriate procedures. Delivery date: Month 35.

Table 1.3c (6)	STREP – WP description

Work package number	WP6	Start date or starting event	Month 1

Work package leader: NCRC

Work package title: **Project management and dissemination**

Participant ID	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green Dependent	Eko-doma	VZ NRW	CRES	Total
Person-months per participant	9	4	2	2	2	1	1	1	1	1	1	1	1	**27**

Objectives:

The project management aims to ensure that project objectives are achieved on time and within the costs estimated. This means co-ordinating all work conducted in the project, overseeing the tasks and work packages, ensuring the development and production of deliverables, as well as reporting to the EC via the contracted reports. The co-ordination will also ensure that appropriate levels of communications are maintained among partners in order to achieve expected levels scientific and technical outputs.

Description of work (for more details, see p. 15-16)

The co-ordinator will carry out the day-to-day management of the project, ensure co-ordination between the project partners and the circulation of project documents, and organize meetings and discussions. Work package leaders will keep the co-ordinator informed of the ongoing status of work packages. The co-ordinator will be responsible for communications with the EC.The co-ordinator will organize the kick-off meeting and officially nominate the Policy Board. The co-ordinator will be responsible for writing all the reports, with input from all the work package leaders. The final report will have broader dissemination and will circulate among partners prior to dissemination outside the consortium. The co-ordinator will ensure that the final report reflects a consensus among all partners. The co-ordinator will also take responsibility for ensuring that the project results are appropriately disseminated. This will include, among others, the design and implementation of a communication plan, the establishment of the interactive project website, as well as its day-to-day administration. To ensure input from policy makers and other relevant research, the co-ordinator will invite members to the Policy Board of the project, and organize meetings and workshops with them. All partners will participate in dissemination of the results and the linking of the project to ongoing policy efforts in different countries.

This work package will include:
Task 6.1 Detailed communication plan
Task 6.2 Setting up and administering the open innovation platform
Task 6.3 Interim assessments
Task 6.4 Facilitation of web-based communications
Task 6.5 Meetings with and feedback from Policy Board (2 meetings)
Task 6.6 Project Meetings (9 meetings)
Task 6.7 Project team workshops (8 workshops)
Task 6.8 Final workshop

Deliverables

D 15 Interactive project website and Open Innovation Platform, administration of online questionnaires. Delivery date: Month 2.
D 16 Plan for the Use and Dissemination of Foreground
D 17 First progress report. Delivery date: Month 6.
D18 Second progress report. Delivery date: Month 18.
D 19 Third progress report. Delivery date: Month 24.
D 20 Fourth progress report. Delivery date: Month 30.
D 21 Fifth progress report. Delivery date: Month 36.
D 22 Final report. Delivery date: Month 36.

Project Effort Form 1 – Indicative efforts per beneficiary

Partic. no.	Participant short name	WP1	WP2	WP3	WP4	WP5	WP6	TOTAL per beneficiary (person months)
1	NCRC	0,5	8	7,5	4	9	9	38
2	ECN	1	11	4	4	10	4	34
3	SURF	0,5	7	10,5	4	7	2	31
4	OEKO	1	7	6	10	5	2	31
5	CEU	9	6	5	5	4	2	31
6	SEI-T	1	1	8	5	3	1	19
7	COWI BALTIC	1	2	4	8	2	1	18
8	ENESPA	0,5	2	3,5	8	2	1	17
9	MKC	0,5	2	3,5	8	2	1	17
10	Green Dependent	0,5	2	3,5	8	2	1	17
11	Ekodoma	1	1,5	3,5	8	2	1	17
12	VZ NRW	0,5	1,5	4	8	2	1	17
13	CRES	0	0	5	0	5	1	11
TOTAL		17	51	68	80	55	27	298

Project Effort Form 2 – indicative efforts per activity type per beneficiary

Activity Type	NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	MKC	ENESPA	Green-Depen-dent	Ekodoma	VZ NRW	CRES	total
RTD/Innovation Activities														
WP1	0,5	1	0,5	1	9	1	1	0,5	0,5	0,5	1	0,5	0	17
WP2	8	11	7	7	6	1	2	2	2	2	1,5	1,5	0	51
WP3	7,5	4	10,5	6	5	8	4	3,5	3,5	3,5	3,5	4	5	68
WP4	4	4	4	10	5	5	8	8	8	8	8	8	0	80
WP5	9	10	7	5	4	3	2	2	2	2	2	2	5	55
Total research	29	30	29	29	29	18	17	16	16	16	16	16	11	271
Consortium management activities														
WP6	9	4	2	2	2	1	1	1	1	1	1	1	1	27
TOTAL BENEFICIARIES	**38**	**34**	**31**	**31**	**31**	**19**	**18**	**17**	**17**	**17**	**17**	**17**	**11**	**298**

Table 1.3e List of milestones

Milestone number	Milestone name	WP involved	Expected date (month)	Means of verification
1.1	Inventory data collection format designed (scope, variables and data format agreed, work allocated to partners)	1	4	plan approved by partners
1.2	Inventory completed (data recorded in database, partners' comments integrated)	1	13	inventory report
2.1	Definition and operationalisation of success criteria (criteria defined, operational measures established, further work divided)	2	4	criteria approved by partners
2.2	Identification and analysis of best and worst practices (the projects representing best and worst practice have been identified)	2	9	definition and classification approved by partners
2.3	Analysis of existing schemes for interaction with target groups & stakeholders (interaction schemes applied by best & worst cases described and analysed)	2	19	report
2.4	Analysis of underlying factors explaining success and failure	2	19	report
2.5	Conceptual model: concise report (model described and reported in suitable format, including examples)	2	19	report
3.1	Map intermediaries (types and roles of intermediary organisations identified and analysed)	3	19	report
3.2	Plan and initiate dialogue: workshops (invitation lists, programme agreed on, work divided)	3	6	workshop invitations and programme
3.3	Validate success criteria with practitioners (opinions of workshop participants recorded, success criteria modified if necessary based on workshop feedback)	3	21	workshop reports
3.4	Identify potentially transferable projects (opinions of workshop participants recorded, transferable projects identified)	3	21	workshop reports
3.5	Identify localisation measures (list of measures needed to adapt programmes to context developed and operationalised)	3	20	localisation plan
4.1	Select and design pilot localisation projects (programmes selected, necessary support measures mobilised, work divided)	4	14	pilot project plans
4.2	Organise and implement pilot localisation projects (projects designed, implemented and documented)	4	32	project documentation
4.3	Feedback on the pilots collected	4	34	feedback reports
5.1	Conduct evaluation (interviews conducted, feedback analysed, reflective sessions organised with project partners and Policy Board, data recorded and analysed)	5	35	evaluation report
5.2	Design Toolkit (user requirements collected, core + supplementary content defined and finalised, 1st web version designed & executed)	5	35	toolkit 1st version

5.3	Workshop for user feedback on toolkit (workshop planned, invitations sent, workshop organised, feedback collected, documented & integrated into 2nd web version)	5	34	report from toolkit workshop, toolkit final version
6.1	Detailed communication plan	6	2	communication plan
6.2	Setting up the open innovation and feedback platform	6	2	website
6.3	Interim assessments	6	6,12,18, 24,30,36	contracted reports
6.4	Facilitation of web-based communications	6	36	website records
6.5	Meetings with and feedback from Policy Board	6	2, 19, 32	Minutes of the meetings
6.6	Project meetings	6	2,5,13,16, 20,28,32,36	Minutes of meetings
6.7	Project team workshops	6	2,5,13,16, 20,28,32	Workshop agenda and presentations
6.6	Final workshop	6	36	Workshop report

A tentative schedule of project reviews is given below:

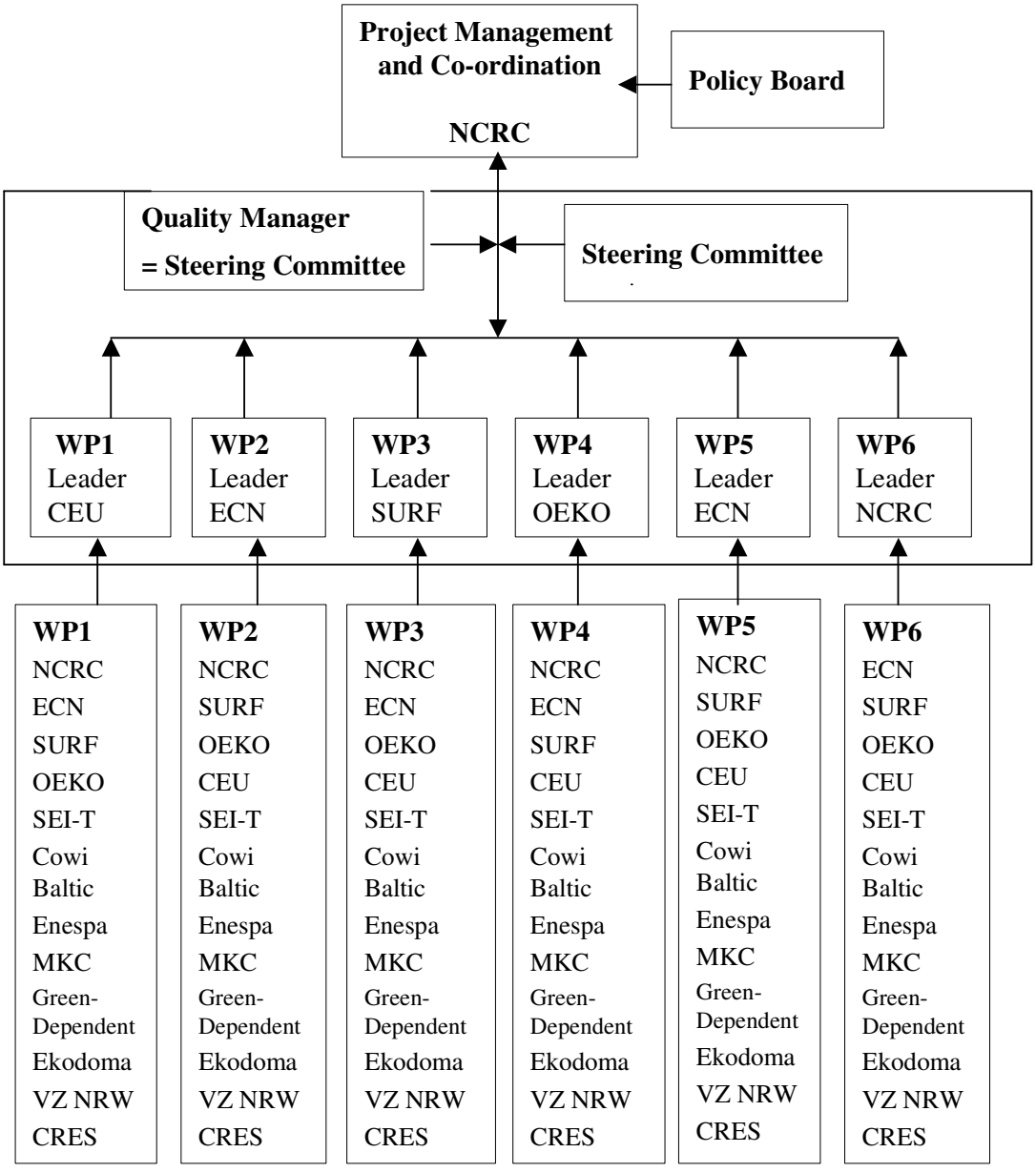
Tentative schedule of project reviews			
Review no.	Tentative timing, month	Planned venue of review	Comments
1	6	to be specified in the kickoff meeting	
2	12	to be specified in the kickoff meeting	EC Project Officer invited to attend
3	18	to be specified in the kickoff meeting	
4	24	to be specified in the kickoff meeting	EC Project Officer invited to attend
5	30	to be specified in the kickoff meeting	
6	36	to be specified in the kickoff meeting	EC Project Officer invited to attend

B2. Implementation

B2.1 Management structure and procedures

The management structure of the project is illustrated in Figure 1.3. The following text explains in detail the roles and responsibilities of each party.

Figure 1.3.Project management structure



Co-ordinator

The project co-ordinator NCRC will have overall responsibility for project management and for the supervision of the technical and administrative aspects of the project. The coordinator will ensure that the project objectives are achieved within the defined time schedule and that the work is carried out in a manner that allows the proper and effective utilisation of the partners' human and capital resources. The execution of the project will follow a common approach for the inventory, analyses, dialogues with intermediary organisations and evaluation. The pilot projects will be selected during the course of the project, and will be tailored to each intermediary organisation's local contexts and needs. The overall project plan will be presented at the kick-off meeting.

The co-ordinator will prepare the structure and frameworks of the reports to be filled in by the partners. These reports will be compiled and issued as the 6-month report, the mid-term report, the 18-month report and the final report at six monthly intervals in accordance with the reporting schedule. The co-ordinator, assisted by the Steering Committee, will be responsible for the coherence and implementation of the whole project including:

- Overall co-ordination of the project
- Providing and distributing the minutes of the meetings to all participants
- Co-ordination of information exchange within the project
- Control of work schedules and deliverables of the Work Packages with the assistance of WP Leaders
- Budget control of the Work packages
- Reporting to the European Commission
- Administrative matters
- Responsible for the project website and for communication of results to the public by means of leaflets and brochures (see plan for using and disseminating knowledge)

Steering Committee

A Steering Committee comprising of the project co-ordinator (NCRC), and the remaining work package leaders, will co-ordinate the overall technical and financial planning to ensure full technical and financial liaison. The Steering committee will also be the Quality Manager. The steering committee will provide input into strategy and organisational issues and define the project standards and agree on all project policies that must be formally and explicitly stated. Tasks assigned to consortium partners will become contractual obligations to the European Commission. The Steering Committee will meet at regular intervals.

The responsibilities of the committee will be to:

- Review project progress and control the activities.
- Ensure that the project maintains its relevance.
- Be aware of relevant activities in other projects.
- Resolve any technical administrative or contractual issues, which have not been resolved by other means within the project.
- Be the overall quality manager of the project, controlling the overall quality of the Work Packages and check the quality of the deliverables.

Decisions will be taken on a consensual basis. In case of disagreement, the Steering Committee will make the final decision.

Policy Board
In addition, a Policy Board will be established to ensure the policy relevance of the project activities. The Policy board will be set up by invitation by the Consortium with the help of the Commission, and will include relevant policy representatives from participating and non-participating countries. The Policy Board Members will act as advisors on the policy relevance and policy implications of the project, as well as enable interfacing with other national and international demand management networks, programmes and projects. Close communication with the Board throughout the project will also enable the CHANGING BEHAVIOUR project to integrate with ongoing national planning as much as possible. Thus, the context-tailored pilot projects or programmes can be linked to existing policy implementation.

The following persons will be invited or have already agreed to serve on the Policy Board:

- Senior Expert, Mrs Antoinet Smits, Behavioural Change Programmes, SenterNovem (confirmed)
- Head of Unit, Mr Seppo Silvonen, Services and Consumers Unit, Motiva, Finland (confirmed)
- Head of Department, Jozsef Feiler, Department of Climate Protection and Energy, Ministry for Environment and Water, Department of Climate Strategy, Hungary (confirmed)
- Chief Engineer Lina Uzsilaityte, Lithuanian Energy Agency (preliminary agreement, to be confirmed)
- Peter Brunt, Energy Strategy Unit, Department of Trade and Industry, UK (not yet confirmed)
- Representative of the IEA DSM Programme (to be invited)

The persons who have agreed to serve on the Policy Board represent the leading edge of policy expertise in demand management issues in their countries and internationally. They include representatives of both expert organizations involved in policy implementation and international exchange of experiences (e.g., Motiva, Senter Novem) as well as top administrators in energy issues on the national level (Energy Agencies, Ministries). Particular attention will be devoted to involving Policy Board members from South Europe.

At least one member will be invited to the Policy Board from each participating country, as well as from the IEA DSM Programme. The Policy Board will meet at least twice, once at the beginning of the project and once shortly before its conclusion. Continual contact with Policy Board Members will be maintained throughout the project.

Consortium agreement
The consortium will sign a consortium agreement before project signature and start.

Work Package leaders
The work package leaders are nominated in the workplan and will provide co-ordination and liaison between and within work packages. Each work package leader will be responsible for ensuring that the tasks in the work plan are achieved as expected, and will be responsible for the deliverables associated with each work package. They are responsible for providing the project coordinator with aid and with information on the ongoing status of the work packages whenever requested. Each work package leader will provide the co-ordinator with

a quarterly progress report indicating the current state of development of the tasks in the work-package over which the leader has responsibility. Work Package Leaders will be responsible for:

- The technical leadership in the Work Packages and the tasks.
- Chairing and inviting meetings on a specific Work Package.
- Co-ordination of information exchange within the Work Package.
- Control of work schedules and deliverables related to the Work Package.
- Quality control of results within the Work Package (tasks).
- Compilation of final and periodic reporting on the Work Package.
- Administrative matters concerning the Work Package.

The Partners

The partners will perform the tasks in the work packages in accordance with the contract. These tasks assigned to the Consortium Partners will become contractual obligations to the European Commission. The time frame for the completion of the tasks indicated in Work Package 1 will also be part of the contractual obligations of the partners. Each work package team will develop its work plan (with the work package leader taking the key role). Work plans will be discussed and detailed at the work package kick-off meeting; the final draft plan will be presented to the project steering group for approval. The partners will peer-review the deliverables as standard procedure.

Planning

The overall work plan is defined further on in this proposal. Detailed planning must fit within this framework. Each work package team will develop its work plan (with the work package leader taking the key role). Work plans will be discussed and detailed at the work package kick-off meeting; the final draft plan will be presented to the project steering group for approval.

The final selection of the pilot programmes to be conducted in Work Package 4 will be made in co-operation with the participating intermediary organisations, as the piloted programmes are selected on the basis of results obtained from the previous work packages.

Conflict resolution

The consortium has strong collaborative ties between the partners and the cohesiveness of the project is not perceived as posing a threat for major conflicts. Nonetheless there is a need for a mechanism for conflict resolution. Every effort will be made by the Co-ordinator to establish a consensus between the conflicting members. The Steering Committee will resolve technical disagreements and may ask for recommendations from third-party experts for this purpose. The case may be presented to the regular meeting of the project for resolution. The conflict will be resolved by unanimous decision. In case a unanimous decision is not reached the committee will give one week to the two parties, the advising expert (if any) and the Co-ordinator to present written recommendations. The decision of the majority will be respected. In cases where legal issues are involved the Steering Committee may request that legal advice is taken and/or may seek the resolution of the conflict in a court of law. The court of law will decide who will undertake the expenses of the procedure.

The contingency plans against the risk assessment described above are mentioned in the Consortium Agreement. Peer review of deliverables is standard procedure, and also described in the Consortium Agreement.

Audits
Audits will be performed according to the requirements set out in the EC's contractual obligation.

Risk assessment and related communication strategy
The project does not entail to actively contribute to the development of potentially dangerous technologies.

Risk factors for the successful realisation of the Changing Behaviour project are:

- Non-performance of partners could lead to the non-successful realisation of the project. Contingency plans to avoid the non-successful realisation of the project, due to non-performance of partners are described in the consortium agreement.
- The discontinuation of selected demand management programmes which the project is supporting through pilots could also lead to the non-successful realisation of parts of the project, more specifically the validation of the context-tailored conceptual model in empirical contemporary cases.

Contingency plans to avoid the non-successful realisation of the project due to discontinuation of selected pilot projects entail the active search for other suitable ongoing demand management projects. In the unlikely case that no alternative programmes can be found, the validation of the tool will take place by analysis of historical projects and programmes previously accomplished by the partners.

Communication strategy: in case of non-performance by the partners, these partners will be notified as described in the consortium agreement. In addition, the EC and relevant stakeholders will also be informed personally by hardcopy, phone or email. In case the project is non-successfully realised, due to discontinuation of selected demonstration projects and failure in finding alternative demonstration projects to assist, this will be communicated to the partners and the EC as soon as possible by means of hardcopy, phone or email. All other relevant stakeholders and the general public will be informed by means of notification on the public project website.

Impact of non-successful realisation of project
If the project is non-successfully realised due to failure of performance of partners, in spite of the consortium agreement, in the worst case the impact of this failure will be neutral. The risk is that the demand management programmes and policies aiming at the implementation of energy efficiency, load management or sustainable end-user generation that Changing Behaviour is aiming to assist will be less successful in terms of implementation than they might have been if the Changing Behaviour team would have increased the effectiveness of the demand management programmes by applying the conceptual model of actors, timing and context developed and the context-tailoring approach. However, the development or deployment of these programmes will occur independently of the successful realisation of the Changing Behaviour project.

B2.2 Individual participants

1. National Consumer Research Center (NCRC) (co-ordinator), Finland

The National Consumer Research Centre (NCRC) is a state research institute for applied consumer research under the Ministry of Trade and Industry. NCRC produces and disseminates research enhancing the well being of consumers and strengthening their influence and decision-making. Other aims are to improve co-operation between consumers and different branches of the economy, support the development of user-oriented technologies, promote sustainable development and improve national competitiveness. In 2006, the NCRC employs 41 persons, with backgrounds in consumer studies, economics and sociology.

Task in the project: NCRC is project co-ordinator and responsible for setting up and administering the **Open Innovation Platform and the technical execution of the Toolkit**. Moreover, it will participate in research, organisation and evaluation in all WPs. NCRC has extensive experience in co-ordinating transdisciplinary research projects. It also administers a number of research-related blogs and open development platforms. It has also developed a number of **methods and tools for action-oriented research engaging service providers, users and stakeholders**.

Staff involved in the project:

Eva Heiskanen (MSc, major Consumer Economics, minor Adult Education; PhD Organization and Management) is Senior Researcher at the National Consumer Research Centre, and is also Adjunct Professor (Docent) at the Helsinki School of Economics. She has done research on environmental and energy topics in consumption and business since 1991. She has served on committees and lectured and supervised at different universities. She is on the Editorial Board of *Journal of Industrial Ecology*, and has published most in environmental management and policy and consumer behaviour (e.g., *J. Consumer Policy, J. Cleaner Production, Transdisciplinary Environmental Studies, Human Technology*), with a focus on science-society dialogue and user involvement in environmental innovations. She serves as work package leader in the FP6 project Create Acceptance.

Päivi Timonen (MSc Consumer Technology, PhD Consumer Economics) is employed as Head of Research at the National Consumer Research Centre. Previous posts include senior researcher at National Consumer Research Centre and Work Efficiency Institute, and Manager at the OKO bank. She has done extensive research on consumers' everyday heuristics in dealing with environmental information. She has published most in the fields of consumer behaviour and technology management. Her current research interests have to do with the relation between leisure practices, consumption and domestic technologies. She currently co-ordinates a Development Arena on Housing involving a number of Finnish research organisations.

Petteri Repo is a Research Manager at the National Consumer Research Centre. His managerial responsibilities include the development the centre's web services and databases. He holds a PhD (Economics, 2000) from the Swedish School of Economics and Business Administration in Finland. He has published research on electronic commerce, mobile services and user participation in product development. His current research interests relate to open innovation systems with special emphasis on participatory web services, interactive media, and ubiquitous computing. He has recently edited a book on the domestication of new technologies.

Mikko Rask specialises in environmental strategies and technology assessment. During his ten-year research career, he has participated, e.g., in Parliamentary Technology Assessment studies. In particular, he has contributed to the methodological development of participatory technology assessment. His PhD thesis (currently under pre-examination) contributes to theoretical developments in distributed expertise and integrated technology and innovation policy.

2. Energy research Centre of the Netherlands (ECN), Netherlands

The Energy research Centre of the Netherlands is the largest research centre in the Netherlands in the field of energy and is also a leading institute in international energy research. At this moment ECN employs about 900 people. The researchers move between fundamental research at universities and practical application of knowledge and technologies.

Task in the project: ECN will be work package leader for WP2 and WP5, i.e., responsible for leading the work of identifying and analysing best and worst practices, developing a conceptual framework, evaluating the project and developing the Toolkit. The ECN team have extensive **experience of managing similar projects** (e.g., co-ordination of the FP6 Create Acceptance project), as well as an **extensive academic and practice-oriented knowledge base in social science energy research**.

Staff involved in the project:

Ruth Mourik is a senior researcher at the Energy research Center of the Netherlands, policy studies department, at the energy innovation and transition group. She has previously worked on research commissioned by the Ministries of Environment and Economic Affairs, local governments and the European Commission. She has a Masters Degree in Anthropology and Sociology at the University of Amsterdam (1996), a Cum Laude Masters Degree in Society and Technology Studies at the University of Maastricht (1997), and a PhD in risk communication, controversy analyses and public participation (Maastricht University, December 2004). She has mainly published in the fields of environmental transition management, stakeholder participation, innovation management, user practices, technology development, risk perception, and societal acceptance of new energy.

Harm Jeeninga is senior research fellow at ECN Policy Studies. He has an academic degree in Experimental Physics and Environmental Science and has been working at ECN since 1997. Mr. Jeeninga has extensive experience in developing and operating energy-environment-economic models, and conducting scenario studies on technology development in national as well as EU-projects. At ECN Policy Studies, Harm Jeeninga is head of department of Energy Innovation and Transition. One of his main activities is to study the conditions for the transition towards a sustainable energy system.

Rob Raven (1975) is a researcher at ECN Policy Studies. He studied Technology and Society at the Eindhoven University of Technology and wrote his thesis on the modelling of energy standards (1999). In his PhD research (2005) Rob analysed the development and implementation of bioenergy technologies in the Netherlands and Denmark. Rob's current work at ECN relates to energy transitions and innovation. His main interests are in system innovations, co-evolutionary analysis of technology and society, renewable energy, and energy policy. He participates in a European project on developing tools for assessing and improving societal acceptance of energy technologies (Create Acceptance). Rob also participates in a large Dutch network on system innovations (KSI).

Ynke Feenstra is a junior researcher at ECN Policy Studies. She has a Master's degree in Culture and Sciences from Maastricht University and is specialised in the relation between technology and culture. Before joining ECN she was a consultant specialised in the communication on sustainability and nanotechnology. At ECN Mrs Feenstra works in the group Transitions and Innovation on projects concerning societal acceptance of technology. She participates in a European project on developing tools for assessing and improving societal acceptance of energy technologies (Create Acceptance) and a national project on flexible electricity networks for the integration of sustainable electricity sources (Flexibel).

Ingo Bunzeck works as a junior scientific researcher at ECN Policy Studies. Mr Bunzeck works in the Energy innovation and Transition group. His research interests are energy transition, emerging energy technologies and technology management. A German native, he is educated in Germany, Finland, The Netherlands and Sweden. He holds a Master's degree from the University of Maastricht/University of Lund in Science and Technology Studies. Prior to that, he worked at the IIC in Berlin, acquiring market and product knowledge in different fields of energy technology such as photovoltaic, solar thermal and wind power and fuel cells. He also holds a master degree in business economics from Germany.

3. University of Salford, Research Centre for Sustainable Urban and Regional Futures (SURF), UK

SURF is a research centre at the University of Salford that undertakes interdisciplinary research on Sustainable Urban and Regional Futures. The Centre has built close connections with the institutions of regional governance and develops strong research linkages with a wide range of corporate and user communities. The Centre's Research Programme is built around three Research Themes, initially covering urban and regional policy, sustainable cities and regions, and infrastructure and utilities. The Centre is supported by over £1 million sterling from the UK Economic and Social Science Research Council and two endowments from United Utilities, a large multi-utility, and Peel Holdings, a UK property development company. The Centre improves understanding of how fundamental economic, social, environmental and technological changes interact to affect urban and regional futures, promotes interdisciplinary analysis of the sustainability of these changes and leads debate about how change can be shaped to promote the sustainability of cities and regions, in the North West and beyond.

Task in the project: SURF will be work package leader for WP3. The SURF team have longstanding experience in research on and collaboration with intermediary organisations, e.g., within the FP5 project INTERMEDIARIES as well as in researching the role of municipalities and urban and regional governance in adopting new energy technologies. It will bring to the project both practical and conceptual **experience of interacting with intermediary organisations as well as identifying and improving their strategic competences.**

Staff involved in the project:

Dr Mike Hodson is Research Fellow at the Centre for Sustainable Urban and Regional Futures (SURF), University of Salford, UK. Mike's research interests focus on city-regional transitions to low-carbon economies and, in developing this agenda, he has undertaken projects funded by the European Commission, UK research councils, sub-national government and through private consultancy. Taking this agenda forward, he is currently working on a UK EPSRC-funded project principally addressing the social and economic implications of hydrogen economies and on the Framework 6 project, Create Acceptance (Contract No.518351).

Simon Marvin is the United Utilities Professor of Sustainable Urban and Regional Development. He has developed a strongly interdisciplinary approach to the relationship between the environment, technological change and cities and regions. Securing funding from the UK research councils and the European Commission (Framework 4 Project ENV4-CT96-0249; Framework 5 Project EVK1-CT-2002-00115; and Framework 6 Project 518351) he has developed an interdisciplinary programme examining the reconfiguring of urban technical networks across the energy, water, telecommunication and transport sectors in collaboration with partners in the UK, Europe and developing cities. Simon has developed close working connections with end users creating tight connections between research and users.

4. Oeko-Institut (Institute for Applied Ecology, OEKO), Germany

The Oeko-Institut is one of the leading environmental research organisations in Germany. The Oeko-Institut's mission is to analyse and evaluate current and future environmental problems, and to develop and implement strategies and models for sustainable solutions. Research at the Oeko-Institut encompasses the levels of basic research, conceptual development and implementation, as well as advisory and consultancy activities, and outreach to the media. The institute not only conducts comprehensive research, but, beyond this, stresses the principle of practical implementation of research results. Innovation, actor-orientation, interdisciplinarity and networking are hallmarks of the Institute's work that prove decisive for implementation. Third-party funded research is commissioned by local, regional, national and transnational governmental bodies, and by industrial companies, political parties, citizens' action groups and NGOs. The Institute is independent of industry and governments, is recognised by law as a non-profit organisation and receives no public funding.

The Institute's Energy & Climate Division is working on problems of energy planning (systems analysis, scenario design), renewable and energy-efficiency technologies, utility regulation and implementation of sustainable energy strategies in liberalised markets and national and international climate policy. Studies have been carried out on economic effects, legal impediments, technological status, and environmental acceptability of energy strategies. Results were taken up in action plans of the German federal government, several States and on the local and regional level, too. The Energy & Climate Division has carried out a number of European projects for DG TREN and other DGs.

Task in the project: OEKO will be work package leader for WP4 (testing of the context-tailored model in pilot projects). The OEKO team have extensive research and **management experience and wide networks** in the subject areas of the proposal, and are currently **responsible for leading a work package involving testing and evaluation of a model in pilot projects** in FP6 funded Create Acceptance.

Staff involved in the project:

Veit Bürger is a research fellow of the Energy and Climate Division of Oeko-Institut in Germany. He has graduated in physics and energy economics and is working as a researcher for the institute since the beginning of 2002. He has specialised in national and international issues of energy policy, mainly instruments for enhancing environmental sustainability in liberalized energy markets. His main research areas include International Energy Policy (e.g. liberalisation of energy markets, assessment of policy instruments), Development, design and assessment of policy instruments for renewable energy sources and energy efficiency, Consumer and transparency instruments (e.g. electricity disclosure, green power market labelling), Development of local strategies for climate protection and Environmental and Energy Economics

Dierk Bauknecht is a research fellow with the Energy and Climate Division at the Oeko-Institut in Germany. He graduated in political science and holds an MSc in Science and Technology Policy from the University of Sussex. He has been with the Oeko-Institut since 2001.His main research areas include Transformation and innovation in power systems, Governance of system transformation, Distributed power generation, Market and network regulation and Market modelling.

Dr. Bettina Brohmann studied psychology, sociology and regional planning. As senior researcher and deputy coordinator of the Energy and Climate Division she has 20 years of experience in among others consumer and motivation research (campaigning), need area approach, public participation in decision-making (mediation) and risk communication. She is mainly responsible for social issues in energy and climate policy (design and evaluation of energy savings programmes in Western Europe and USA) as well as for the issues of scientific evaluation. She has been coordinator of the network of about 100 membership municipalities of Öko-Institut (concerning energy and climate change and sustainable consumption) and member of the German Risk Commission on health and consumer protection, risk communication and participation.

5. Kozep-europai Egyetem (Central European University, CEU), Hungary

CEU (http://www.ceu.hu) is an internationally recognized institution of post-graduate education in social sciences and the humanities, located in Budapest, Hungary. Established in 1991, CEU attracts nearly 1000 graduate students each year from over 50 countries. CEU aims at excellence in the mastery of established knowledge, excellence in the creation of new knowledge in the social sciences and the humanities, and excellence in developing the policy implications of both. The **Department of Environmental Sciences and Policy** (http://www.ceu.hu/envsci) of the CEU is a centre for environment-related studies, which is uniquely positioned to be a leader organization in sustainable development related research and market transformation activities for CEE and fSU. CEU has devoted its work to sustainable energy research and the promotion of sustainable development policies for a decade. The Department has a long and successful track record of collaborating with leading international agencies on addressing environmental and related issues of the region. CEU has participated in the development of the 4th Assessment report of the IPCC, has co-ordinated the study and edited the final GEF/UNEP report "Economics of Greenhouse Gas Limitations: Hungary Country Study", has been serving as the UNEP's Collaborating Center in Central and Eastern Europe for the Global Environmental Outlook initiative. CEU has been participant to 3 Intelligent Energy Europe projects, to several energy related FP projects and has been commissioned to carry out data and information collection, evaluation and analysis related to energy demand, sustainable energy production and relevant policies. The department and its faculty have been working on international research projects funded by, e.g., the World Bank, EBRD, NATO, UNEP, UNDP, UNICEF, WHO, the European Commission (SAVE, ALTENER, PHARE, IEE), GEF, IFC, WEC, The Potsdam Institute for Climate Impact Research, NOVEM, and private sponsors. Energy-related expert advice has been provided to the Hungarian Ministry of Environment and Water on the preparation of the Third and Fourth National Communication of Hungary to the UNFCCC as well as the long-term climate change strategy of Hungary.

Tasks in the project: CEU will be work package leader for WP1. CEU has valuable experience in **data and information collection, evaluation and analysis related to energy demand, sustainable energy production and relevant policies, as well as broad international networks with both academics and practitioners.**

Staff involved in the project:

Diana Ürge-Vorsatz, MSc, Dr, is currently an Associate Professor at the Department of Environmental Sciences and Policy of the Kozep-europai Egyetem (CEU). Dr. Ürge-Vorsatz has extensive research and consultancy experience in the field of sustainable energy technologies, policies and programmes, and climate change policy for Central and Eastern Europe, with particular focus on energy efficiency improvement and the promotion of renewable energy. She has led several research projects and authored over 70 book chapters and research articles in the field of energy efficiency, renewable energy and climate change mitigation. Dr. Ürge-Vorsatz has provided consultancy services for, among others, the European Commission, the European Parliament, the Hungarian Ministry of Environment, GEF and IFC and GEF/UNEP. She is now also serving as a Coordinating Lead Author for the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

Benigna Boza-Kiss, MSc, is PhD student and junior researcher at the Department. Ms Kiss has worked on various energy related research projects, such as residential and commercial energy demand, energy efficiency and standby power, climate change. She contributed to the 4th National Communication of Hungary to the UNFCCC. Presently she is research assistant in three Intelligent Energy for Europe funded projects focusing on market transformation of appliances in the residential and the tertiary sectors in Europe and an FP6 project. Her MSc thesis was on Climate Change Literacy in Old and New Member States, while her on-going PhD research is on behavioural aspects of household energy efficiency.

6. Stockholm Environment Institute Tallinn Centre, Estonian Institute For Sustainable Development (SEI-T), Estonia

Estonian Institute for Sustainable Development, Stockholm Environment Institute Tallinn Centre (SEI-Tallinn) is non-governmental, non-profit foundation with the objective to direct the decision-making on community development and on environment towards balance and sustainability. It is aimed at developing links with scientific, environmental and policy communities in Estonia, the Baltic Region and countries in transition. Practical implementation of our knowledge into everyday life is a way towards sustainability. Project implementations involve industrial community, local governments and other interest groups. The results of our work are made available to a different range of audiences through publications, electronic communication, software packages, and conference reports, training workshops, training courses and roundtable policy discussions. Contacts and collaborative relationships are vigorously maintained within the scientific, political, administrative, intergovernmental and business communities worldwide. SEI-Tallinn is fully integrated part of the SEI, established in 1972, having international research network Centres in UK, US, Sweden (Stockholm) and Thailand (Bangkok). At the moment the staff of SEIT consists of 15 experts and project managers. In building up the different programme areas we have considered their compliance with the general strategy of SEI, scientific and research potential of our team and community/market demands. At present, there are three main working areas in SEI-Tallinn: *Environmental Management Programme, Sustainability Measures Programme and Climate, Energy and Atmosphere Programme.*

Tasks in the project: SEI-T will participate in all work packages of the project, in particular in WP3, contributing to this work package through its wide networks with intermediary organisations. SEI-T's **experience in energy policy and management in New Members States** will make a valuable contribution to research, organisation and dissemination.

Staff involved in the project:

Tiit Kallaste, PhD (Director of the Climate Change, Energy and Atmosphere Programme). He has over 25 years experience in the environment field and the implementation of economic instruments. In 1992 he was one of the founders of the Stockholm Environment Institute Tallinn Centre in Estonia. He co-ordinated the two UNEP/GEF programmes in 1996-1998, was counterpart in the five-country project for EC Environment and Climate Research Programme on Accounting and Accreditation of Activities Implemented Jointly, is a member of the OECD Environment Directorate Annex I Expert Group, and co-operates with the UN FCCC Secretariat as expert for in-depth Reviews of National Communications, among others. Dr Kallaste is the author of tens of books and research papers on climate change mitigation and renewable energy promotion. He is a member of Governmental Expert Commission on Implementation of UN FCCC and Kyoto Protocol. He has participated in several EU funded international projects; ENER - European Network for Energy Economics Research Forums 3, 4 and 5, EC FP6 programme projects NEEDS and CEERES, also EC IEE programme project ENERGY TROPHY+.

Enn Kareda, PhD (Project manager of the Climate Change, Energy and Atmosphere Programme). He has over 20 years experience in environment related economics as senior research associate in the field of regional planning and environmental impact assessments in Institute of Economics of Estonian Academy of Sciences. In SEI-Tallinn he works mainly with renewable energy sources and Estonian energy sector development problems. He was project manager for the strategic environmental impact assessment of the Estonian electricity development plan for period 2005-2015. This project made constructive proposals for the RES development stimuli and taxation system. These ideas were published in the journal "Environmental Technology". Dr Kareda has written a number of articles on environmental economics in various books, journals and newspapers. Dr Kareda has been involved and currently is the participant also in several international research programs – European Network for Energy Economics Research Forums 3, 4 and 5, EC FP6 programmes NEEDS and CEERES.

7. UAB Cowi Baltic, Lithuania

Cowi Baltic is a leading energy and environment consulting company in Lithuania, member of Lithuanian energy consultants association. Cowi Baltic is a member of the international COWI Group. Cowi Baltic provides technical assistance and advisory services with special attention to environmental and energy efficiency issues. The company's services include:

- National energy policy issues with a focus on energy efficiency, renewable energy, emission trading,
- Regional and local level energy policy issues and infrastructure planning,
- Climate change issues related projects (Joint Implementation projects, emissions reduction strategies, CO_2 monitoring plans),
- Technical-financial optimization in modernization of industrial heat generation utilities,
- District heating modernization feasibility studies, heat market related business plans,
- Preparation of strategies for implementation of energy efficient technologies,
- Energy audits, energy efficiency certificates,
- Environmental valuation.

Consultants of Cowi Baltic have implemented such projects as preparation of National Allocation Plans for periods of 2005-2007 and 2008-2012, preparation of business plans and application forms for EU Structural Funds co-financing for a number of Lithuanian district heating companies, preparation of municipal heat supply plans. Between number of projects implemented for Ministry of Economy of Lithuania are: preparation of the Order that regulates issuing of guarantees of origin in Lithuania, Analysis of potential of energy end-use efficiency and preparation of recommendations for increase of energy end-use efficiency, in view of the directive 2006/32/EC on energy end-use efficiency and energy services, Establishment of recommendations for possible voluntary agreements in Lithuania in order to increase energy end-use efficiency.

Tasks in the project: Cowi Baltic will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It will bring to the consortium a longstanding experience in **energy policy support and energy efficiency project management.**

Staff involved in the project:

Martynas Nagevicius, Head of Energy and Environmental department of Cowi Baltic. He has obtained Diploma of Master of Science in Energy planning in 1995. After 6 years as team senior engineer with Danish subsidiary consulting company COWI Baltic, Mr. Nagevicius founded his own company Ekostrategija in 2002. Within few years Ekostrategija has became one of the leading consulting companies in Lithuania. From the 31-st of October, 2007 Ekostrategija has merged with Cowi Baltic.

Inga Valuntiene, Head of the Strategical Planning Division. She has obtained Diploma of Master of Science in Energy planning in 2003. Additionally she was studying Environmental management for one semester in Aalborg University in Denmark. Key qualifications are: territorial planning and energy planning projects, RE related projects, preparation of legal acts related with energy and planning sectors, interpretation and transfer of EU Directives requirements to the national legal basis. One of the latest projects was establishment of recommendations for possible voluntary agreements in Lithuania in order to increase energy end-use efficiency. The work included analysis of voluntary agreements system in other EU countries, creation of possible voluntary agreements scheme in Lithuania including necessary changes in national legal basis, meetings with representatives from natural gas supply, electricity distribution and district heating companies.

8. Energy Service Company Enespa Ltd (Enespa), Finland

Enespa is a privately owned energy service company (ESCO). Since establishment of the company in 1999 it has pioneered in various projects of the demand management of energy. The company is supported by a network of other companies and organizations; owners include two energy utilities (Lumituuli ltd, which is a small wind-power producer, and Vantaa Energy, which is large utility of the metropolitan Helsinki area). The business development draws on the faculties of the Helsinki School of Economics (HSE), Technical Research Centre of Finland (VTT) and the Helsinki University of Technology (HUT).

The services of Enespa cover the planning, management and financing of energy efficiency and bio-energy investments. The most important customer segment of the company comprises of public organizations such as municipalities, while the references also include projects with private SMEs. Within these segments the projects of Enespa have a dual focus. Firstly, the company expertise and references relate to energy efficiency project with the use of various heat-pump technologies in the generation and recovery of heat. Secondly, the references include investments that are related to the use of biofuels in end-user generation. Enespa has also been involved in the commercialization and adoption processes of new energy efficiency technologies.

Enespa has been active in developing and promoting new business concepts for demand management of energy. Nationally, it was the first company to explicitly take on ESCO-concepts. Since then, the company has diversified the offered services to cover combinations of consultancy, saving-guarantees and financial services. The company has also been successful in gaining support for the ESCO business model in the national finance community of Finland. In addition, the company representatives have had ongoing co-operation with the national energy efficiency agency Motiva.

Tasks in the project: Enespa will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It will bring to the consortium knowledge of the **possibilities, problems and behavioural change issues involved in running ESCO projects.**

Staff involved in the project:

Harri Valpola has a M.Sc. in technical physics and D.Sc. in computer science. He acts as the CEO of Enespa and been in a central role in the business development of Enespa since the foundation of the company. His academic research and technical expertise is focused on new control and automation methods. He has a long career as a researcher in both national and EU-funded research projects (BLISS, IST-1999-14190; ADAPT, IST 2001-37173).

Mikko Jalas has a PhD in Organization and management and has been involved in research projects of demand management at the Helsinki School of Economics since 1999. He also has several years of industry experience in environmental management, and is responsible for the finance and for the investor relations of the company. He has published research on private energy demand and energy policy in internal journals such as *Ecological Economics* and *Journal of Industrial Ecology*, and is currently preparing an invited manuscript on rebound effects for the UK Energy Research Centre (UKERC) and Palgrave.

9. Manchester Knowledge Capital (M:KC)/Manchester Enterprises (ME), UK

Manchester: Knowledge Capital (M:KC) is a strategic partnership of Greater Manchester's ten local authorities, it's universities, industry, businesses and other public agencies, concerned with the development of the knowledge economy. Competitiveness, innovation and sustainability are key components of this. Our strategic role is to help our partners identify and develop new ideas and new ways of working together; on a more operational level we also lead on key projects. One such initiative is the green energy programme Manchester is my Planet, which is developing a range of practical sustainable energy initiatives that can lead the city-region along the path to a low carbon economy. As part of the Manchester is my Planet initiative M:KC is testing novel ways to engage with the public on the matter of energy and climate change and to date over 15,000 people living in the city-region have taken the Manchester is My Planet pledge to help reduce CO2 emission by 20% before 2010. see www.manchesterknowledge.com and www.manchesterismyplanet.com

M:KC operates on a not-for-profit basis. The accountable body of M:KC is Manchester Enterprises. Manchester Enterprises is the economic development agency for Greater Manchester, with a strategic remit to deliver economic growth and to improve the prosperity of local people. Manchester Enterprises is responsible for economic analysis, economic development strategy formulation and implementation, and programme management. The most relevant recent projects of M.KC include:

- Manchester is my planet
- Science City Programme
- City Growth Strategy

Tasks in the project: M:KC will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It will bring to the consortium knowledge of the social, technical and behavioural issues in linking energy demand management to **urban development projects, SMEs and regional governance.**

Staff involved in the project:

Keith Boxer Innovation Director, Manchester:Knowledge Capital. Keith Boxer is a qualified architect with more than 15 years experience of working with sustainable energy projects, in particular in Scandinavia where he was Director of Gotland's Regional Energy Agency. While working with the agency on Gotland he was responsible for developing and implementing the regional energy plan: Energi 2005. Because of its work on developing sustainable energy initiatives the island of Gotland was a winner of the European Commission's Campaign for Take off Award in 2003.

Keith joined Manchester: Knowledge Capital as Innovation Director in 2005, where he is leading the Green Energy Revolution project, Manchester is my Planet, which involves the development and implementation of a wide range of practical sustainable energy initiatives across Greater Manchester. The need for a city-wide energy plan for Greater Manchester was identified during the feasibility study carried out by Manchester:Knowledge Capital in 2005. Previous positions held include Director, Gotlands Energy Agency; Director of Sustainability, Whitbybird Engineers; Sustainability Director, Sheppard Robson Architects and Project manager, Vindkompaniet AB. He has managed a number of EU projects, including:

- SAVE II CREATIONE (Creation of Energy Agencies in Northern Europe)
- Thermie Project Bockstigen-Valar 2.5MW offshore wind farm
- Altener – IRRESSI, Altener 100REN-Isles (Development of energy plans for European islands)
- FP5 EUBART
- FP5 USHER

10. GreenDependent Sustainable Solutions Association (GreenDependent), Hungary

GreenDependent is a not-for-profit non-governmental association that was founded in 2005 by ten professionals committed to working towards the creation of a sustainable future, all of them bringing different expertise to the association (e.g. environmental, sustainability and sustainable energy management, economics, architecture, education and training, project management). Prior to the foundation of GreenDependent, its members worked together on projects in different sectors.The mission of GreenDependent is the research, creation and promotion of sustainable lifestyles, sustainable production and consumption patterns and levels. In order to fulfil this mission, GreenDependent carries out educational, research, consulting and promotional activities in three main areas: Sustainable Energy, Sustainable Living-space and Everyday Sustainability. The members of GreenDependent have experience of working in and with academia, businesses (SMEs as well as large corporations), NGOs and authorities, and thus have contacts with a large variety of stakeholder groups. The Association believes that a sustainable future is only possible if all these groups cooperate, so members take initiation and facilitation of dialogue between the different players the focus of their mission.

Tasks in the project: GreenDependent will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It will bring to the consortium experiences in **energy-related lifestyle change and change management in the building sector.**

Staff involved in the project:

Edina Vadovics, M.Ed., M.Sc., Ph.D. candidate. Ms Vadovics will act as project manager for GreenDependent in the project. She is president of GreenDependent and works on her Ph.D. at Central European University (CEU). Her research focuses on sustainable lifestyles and the barriers and opportunities that exist in CEE countries in relation to a more widespread change towards them. Prior to her Ph.D. studies, she worked in environmental and sustainability management, and delivered training courses in the field both for companies and postgraduate students as an assistant professor for the University of San Francisco, and as a guest lecturer at the Budapest College of Management. She acted as research assistant in the EMUDE (Emerging User Demands for Sustainable Solutions) FP6 project for CEU. She has also worked as an external expert to the EEA and UNEP regarding SCP issues. Her recent publications deal with green procurement, green office programmes and sustainable user innovations.

Richard Halmay, M.Sc., M.Sc. With a degree in environmental management, alternative energy engineering and horticultural engineering, Mr Halmay is the vice-president of GreenDependent. Besides being active in building up the Association, he furthers the cause of environmental protection in his own entreprise through editing NatureZone, an online magazine that promotes sustainable living and PanNatural, which is an English language environmental news portal. Prior to these engagements, Richard Halmay worked in numerous environmental and sustainable energy project in the corporate, civil as well as the public sector (Ministry of Environment, responsibility for renewable energy issues). He co-authored several publications, including „Money thrown in the window", a case study collection of investments and measures producting environmental as well as economic returns. He also planned and implemented an independent energy system for a small farm in Hungary.

Peter Medgyasszay, M.Sc. (architecture), MBA, Ph.D. candidate (architecture). Besides being a member of the Association, Mr Medgyasszay works in sustainable building and architecture as an architect as well as a consultant, which includes the management of publicly funded programmes such as PHARE. Earlier, Peter Medgyasszay was director of the Hungarian NGO Independent Ecological Centre and was responsible for their sustainable building programme. His recent publications deal with sustainable buildings, sustainable housing solutions and sustainable urban design.

11. Ekodoma Ltd, Latvia

Ekodoma is an independent engineering consulting company with more than 10 years' experience, working towards energy efficiency and renewable energies. The Company is registered at the EC Central Register of Consultancy PHARE/TACIS. The team consists of specialists, experts and researchers working with energy and environment audits, business plans, expertise, methodologies and follow-up activities. It has undertaken a large number of successful local and international projects on energy efficiency, renewable energy and energy policy, including several of the European Commission. Ekodoma offers project development, project management, technical supervision of projects which involve energy measures, assessment of the social impact of energy efficiency & renewable energy and interfaces with neighboring environmental fields. Following an integrated approach Ekodoma places strong emphasis on the economic, social, legal and administrative framework of strategies for energy policies. In the public sector, among the clients of Ekodoma there are several Latvian local governments, like for example Riga, Daugavpils, Liepaja, and many others. In the last years, Ekodoma has provided several services to Latvian Ministries, e.g., the Latvian Ministry of Environment and the Ministry of Economy, for the implementation of national policies and the transposition of European directives. Ekodoma strongly addresses the residential sector with the implementation of energy audit in building and energy monitoring projects. Ekodoma participates in several international projects on the implementation of international programs, such as OPET networking, ALTENER, PHARE, SAVE, and AIJ projects (cooperation with 27 municipalities for switch fuel projects in DH from oil and coil to RES) for the Swedish and Dutch government. It also co-operates with international and local ministries, agencies and companies of several countries (e.g. Denmark, Germany, UK, Norway and the Netherlands).

Tasks in the project: Ekodoma will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It brings the consortium wide experience in **energy policy support and residential energy efficiency project management.**

Staff involved in the project:

Ms. Andra Blumberga has a professional experience of more than ten years in energy engineering. Her professional career started as an energy auditor and project assistant, then the position of Manager of Ventilation & Refrigeration Department at ABB Latvia. Ms. Andra Blumberga has been managing several demonstration and dissemination projects in Eastern Europe and has a great experience in energy end-user, energy auditing & modeling and housing maintenance, combined with an excellent environmental background. In the last 4 years, she acquired good experience in third party financing and procurement for energy efficiency projects, promoting different energy efficiency investments both in the private and public sector.

Mrs. Dagnija Blumberga has a professional experience of more than twenty years in the energy and environmental field. She started her professional carrier as a Senior Lecturer at the Riga Technical University (RTU) and then becoming a Professor, head of Division Energy Systems and Environment. Mrs. Blumberga founded the engineering and consultancy company Ekodoma for energy and environmental issues in 1991 together with Mr. Veidenbergs. As senior expert at Ekodoma she has been involved in demand side management projects, energy efficiency and environmental projects focusing also on political and administrative aspects. She is as well as expert for calculation of heat and electricity tariffs for utilities.

Mr. Claudio Rochas became Project Manager of Ekodoma Ltd in 2001, continuing the great international mission of the company and contributing to the business development of the firm. As energy engineer of Ekodoma he has been involved in energy and environmental auditing and monitoring programs and he has worked as a project engineer and project manager on various projects, in particular in relation to heat and power supply and to monitoring electricity consumption in the primary and tertiary sector. Mr. Rochas is specialized in energy and environmental modeling, emission monitoring and calculation. In the last 4 years working in Ekodoma, he has been involved in preparation of tender documentation and business plan.

12. Verbraucherzentrale Nordrhein-Westfalen (VZ NRW), Germany

Verbraucherzentrale Nordrhein-Westfalen (Consumer Association North Rhine – Westphalia) is the leading regional consumer organisation in Germany. Like the other regional Verbraucherzentralen it is established as a non-profit organisation born by women-, family-, and home economics associations, trade unions, welfare organisations, tenant associations, and environmental associations as well as local consumer unions. It works on behalf of public interest.

Target group of Verbraucherzentrale Nordrhein-Westfalen are the private consumers. In economic terms consumer organizations act as an counterpart to commercial and industrial organizations supporting private consumers, so that they can act in the markets on an improved information basis and with strengthened consumer rights thus encouraging competition which may lead to better product and service quality at appropriate prices. Neutral information for consumers (with respect to commercial interests) as provided by Verbraucherzentralen in Germany is a powerful tool to overcome problems of adverse selection due to asymmetric distribution of information. That allows giving a contribution towards development of competitive markets.

Verbraucherzentrale Nordrhein-Westfalen is institutionally funded by the state government and by local authorities for the general consumer work in a close meshed net of advisory centres throughout North Rhine – Westfalia (well over 50). Furthermore public funds are acquired to work on special consumer topics like energy or environmental consultancy and generalising work on these topics.

The Association´s special consumer topics –department has a working emphasis on Sustainable Consumption and Environmental affairs as well as on Energy (lowering energy consumption of buildings an electricity consumption in households by efficiency improvements, use of renewable energy sources and appropriate consumer behaviour). The methods used comprise consultancy and information campaigns, which are most commonly ccordinated with local stakeholders, as well as PR especially within local press, broadcast and TV.

Tasks in the project: VZ NRW will contribute in particular to WP3 (organizing workshops) and WP4 (pilot projects) by managing or participating in one of the pilot projects. It will bring to the consortium wide experience in **energy consultancy and information campaigns for households.**

Staff involved in the project:

Helmfried Meinel holds a Diploma Degree on eletrical engineering (Stuttgart University). After three years of research at the Institute for Physical Electronics of Stuttgart University he became policy advisor for R&D for a federal parliamentary party. Since 1988 he works at Verbraucherzentrale Nordrhein-Westfalen and has built up the energy consultancy department. Since 1997 he is member of the Management Board of Verbraucherzentrale Nordrhein-Westfalen and manager of the unit "special consumer topics" with departments of energy, environment and sustainable consumption, nutrition, and care and housing.

Udo Sieverding holds a Diploma Degree on geography (Münster University) and has been member of the scientific staff of Verbraucherzentrale Nordrhein-Westfalen since nine years. He has been working mainly on climate protection and on mobility topics, both in supporting environmental advisors and in carrying out special projekts. Since May 2007 he is head of the Department of Energy. The energy group carries out different projects on in-situ and virtual energy-consultancy.

Ulrike Schell holds a Diploma Degree on nutritional science and houshold economics (Bonn University) She works at Verbraucherzentrale Nordrhein-Westfalen since 1981 and is head of the Department of Environment and Sustainable Consumption. She has been involved in different comsumer research projekts within Verbraucherzentrale Nordrhein-Westfalen and is also member of the strategic advisory board on social ecological research of the federal research ministry.

13. The Centre for Renewable Energy Sources (CRES)

The Centre for Renewable Energy Sources (CRES) is the Greek national Centre for Renewable Energy Sources (RES), Rational Use of Energy (RUE) and Energy Saving (ES). The main goal of CRES is the promotion of RES, RUE/ES applications at a national and international level, as well as the support of relative activities taking into consideration the environmental impacts, in the production/transfer/energy-use chain.

CRES is a scientific/technological establishment of international prestige, competent and qualified to offer, in the fields of its activities, valuable services supporting the planning and implementation of both national and European policies. CRES apart from dealing with energy planning issues on RES and RUE/ES, always in accordance with the policy of the Ministry of Development, also develops the necessary infrastructure for the implementation of the investment programmes on RES and RUE/ES. Moreover, it is a Research and Technological Centre for RES, RUE/ES, by promoting applied research and technological development, by developing research and demonstration infrastructures and exploiting the research results stemming out of these aforementioned activities for supporting the RES and RUE/ES market with specialized products and services. In this context it has developed strong liaisons with the major key actors of energy market, ministries, utilities, municipalities, regulators, investors, consumers etc. CRES implemented several national and European projects and has significant experience on information technology including Geographical Information Systems (GIS) Platforms, real time information processing and internet applications. It has also experience on Distributed Generation issues, such as RES investments profitability assessment and management of electrical networks in a Dispersed Generation environment. It developed and implemented decision support information systems, using GIS techniques, for the assessment of the technical and economical RES potential in a given area.

CRES will contribute to the project by organising a **workshop for intermediary organisations in South Europe**, as well as through involvement in the **development, localisation and dissemination of the Toolkit**. Moreover, through CRES, South European members will be invited to the Policy Board of the Project.

Staff involved in the project:

Dr. D. Papastefanakis is a senior expert and high-leveled Director in CRES. He has significant expertise in the domains of implementation of local and regional energy policy, RES/RUE, development of dissemination Strategies and transfer of energy technologies. Within the last 20 years Dr. D. Papastefanakis has assisted in the development of the regional energy offices in Greece and he has developed investment guides for the energy sector in the Balkans and Mediterranean. Due to his excellent qualifications he was awarded outstanding positions as an Advisor to the European Commission Directorate General for External Economic Relations, to the Directorate General for Energy, to the Governmental and Regional bodies, the Greek Ministry of Development in the design and implementation of energy projects.

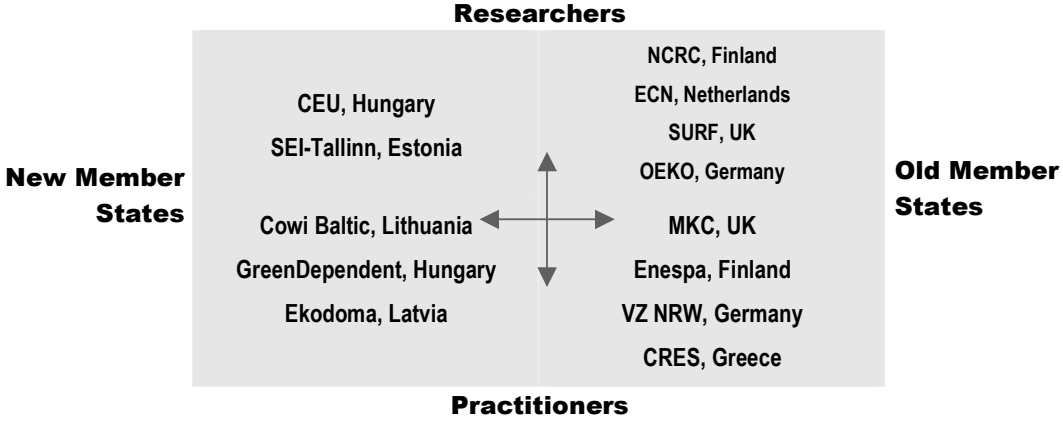
Ms Christina Giannakidou holds a degree in Chemical Engineering from the Aristotle University of Thessaloniki, an MSc in "Environment and Development" from the National Technical University of Athens. She has worked in the private sector on the elaboration of Environmental Impact Assessment studies for various small-, medium- and large-scale projects, Industrial Pollution Control, implementation of EU legislation both in Greece and Cyprus and Water Resources Management studies. She has also worked as coordinator – project managent in the National Park of Schinias – Marathon. In CRES she is working on national, EU and international projects as project manager and consultant in environmental issues.

Ms Eirini Karakatsani received her diploma in Chemical Engineering, her M.Sc. in Computational Mechanics and her Ph.D. in Chemical Engineering Thermodynamics from the National Technical University of Athens. She also holds an MBA in Engineering-Economic systems from the National and Capodistrian University of Athens, the University of Piraeus and the National Technical University of Athens. During her Ph.D. studies, she has been a post-graduate research fellow of the National Center for Scientific Research (NCSR) "Demokritos". She has also worked as Quality Assurance Manager in the Greek pharmaceutical industry "DEMO". She joined CRES in October 2007 and she is working on national, EU and international projects.

B2.3 Consortium as a whole

The consortium as a whole represents an interdisciplinary and transdisciplinary set of competences, which are designed to support one another, to translate knowledge among different scientific disciplines, and to translate knowledge from research to practice and vice-versa. Moreover, the structure of the consortium will enable the exchange of experiences between old and New Member States, as depicted in Figure 3.

Figure 3. Competencies and modes of information exchange represented by the composition of the consortium



The researchers in the project team have a solid background in energy research, and also represent different disciplines that are relevant to understanding the technical, social and behavioural changes involved in the successful implementation of demand management programmes. The various disciplines represented include energy economics, sociology, anthropology, science and technology studies, environmental management, consumer economics, political science and organisation studies. The participating researchers have published widely in the relevant fields of research. During the project, their publishing and conference activities will serve to validate the findings through feedback from the academic community.

The practitioners in the project team represent different types of intermediary organisations in the field of energy policy, energy services and demand side management projects. They have experiences in a wide variety of tasks ranging from strategic policy advice and policy implementation to the concrete operation of energy audits and other customer-centred service projects. They also have a wide experience in operating projects in their countries, as well as in communicating with policy makers, programme target groups and stakeholders. Moreover, many of them are members of relevant business and professional associations, and are thus well networked with other intermediary organisations in their field.

A number of the participants are SMEs that are intensively involved in (a) providing energy services for other SMEs and (b) selecting and providing feedback on new energy technologies and energy-efficient equipment. Their participation will ensure a transfer of key project results to the relevant user (e.g., construction) and producer (e.g., equipment) industries.

Two of the partners are NGOs and two other partners have close ties with the NGO community. This will enable the project to network toward the NGO community and mobilise dialogue with civil society.

B2.4 Resources to be committed

The aim of the project is to work together with a broad group of intermediary organisations and policy makers, and to work on a broad range of programmes targeted at different end-users (SMEs, building sector, households). For this purpose, we have put together a large consortium that has (a) a broad geographic range, (b) experience and knowledge in different end-user sectors and (c) both theoretical and practical knowledge in behavioural change and demand management. This consortium composition and the workload allocated to partners will provide sufficient resources to carry through the project, produce high-quality results, and ensure their dissemination to interested parties in an appropriate way.

In the following, a management level description of resources and budget is provided. Then, specific resources to be committed to the pilot projects, workshops and Toolkit development are described.

Management level description of resources and budget

Table 2.1 provides an overview of the allocation of work between the partners. Table 2.2 provides an overview of the allocation of the budget to different work packages, partners and activities.

Table 2.1 Allocation of work between partners

partner no	Short name	Expertise contributed to the project	Role in Changing Behaviour	Resources: personnel & equipment
1	NCRC	Management resources; participatory & action research, communication & web design, social science energy research	- Coordinator - Administrator of interactive website - Technical execution of Toolkit - Participation in research and workshop organisation	- 38 person months - server, computer and web publication resources of the NCRC
2	ECN	Energy policy & social science energy research, energy and new technology project management tools, management experience	- WP2 and WP5 leader - Management support - Research and publication activity - Toolkit content development	- 34 person months - wide networks in energy policy; international networks
3	SURF	Intermediary organisations, new energy services, built environment; urban and municipal projects	- WP3 leader - Research and publication activity - Science-society dialogue quality assurance	- 31 person months - wide networks in science-society dialogue
4	OEKO	Energy policy, planning & acceptability research, interdisciplinary	- WP4 leader - Organisation of the pilot projects - Research and publication	- 31 person months - wide networks in energy policy and energy projects

		research	activity	
5	CEU	Energy policy, DSM programmes, Europe-wide programmes, New Member States	- WP1 leader - Database execution - Participation in workshop organization - Networking with international projects	- 31 person months - database execution resources - wide networks in international energy projects
6	SEI-T	Energy policy, industry & local programmes, Europe-wide programmes	- Partner; participation in workshop organization - Policy & NMS aspects	- 19 person months - wide networks in international energy
7	Cowi Baltic	Energy policy, efficiency potentials, energy technologies, energy audits and project management	- Partner; management/ participation in a pilot project - Policy consultant perspective	- 18 person months - local networks
8	Enespa	ESCO projects; energy efficiency and renewable investments; SMEs and municipalities	- Partner; management/ participation in a pilot project - ESCO perspective	- 17 person months - local networks
9	M:KC	Local energy planning; collaborative initiatives; built environment	- Partner; management/ participation in a pilot project; - Local & SME perspective	- 17 person months - local networks
10	Green-Depen-dent	Sustainable energy, sustainable buildings, sustainable consumption	- Partner; management/ participation in a pilot project - NGO perspective	- 17 person months - local networks
11	Ekodoma	Energy projects (local & international); energy policy; local government projects; residential sector	- Partner; management/ participation in a pilot project; - Energy consultancy perspective	- 17 person months - local networks
12	VZ NRW	Sustainable consumption, energy efficiency in buildings & the household; consumer information	- Partner; management/ participation in a pilot project - Consumer agency perspective	- 17 person months - local networks
13	CRES	Energy planning, energy market, energy policy, DSM programmes	- Partner; organisation of a special workshop for South European intermediaries - Participation in the development and dissemination of the Toolkit in South Europe	- 11 person months - local, national and regional networks

Table 2.2 Overview of budget allocation to work packages, partners and activities

NCRC	ECN	SURF	OEKO	CEU	SEI-T	Cowi Baltic	MKC	ENESPA	GreenDependent	Ekodoma	VZ NRW	CRES	total
0,5	1,0	0,5	1,0	9,0	1,0	1,0	0,5	0,5	0,5	1,0	0,5	0,0	17
8,0	11,0	7,0	7,0	6,0	1,0	2,0	2,0	2,0	2,0	1,5	1,5	0,0	51
7,5	4,0	10,5	6,0	5,0	8,0	4,0	3,5	3,5	3,5	3,5	4,0	5,0	68
4,0	4,0	4,0	10,0	5,0	5,0	8,0	8,0	8,0	8,0	8,0	8,0	0,0	80
9,0	10,0	7,0	5,0	4,0	3,0	2,0	2,0	2,0	2,0	2,0	2,0	5,0	55
9,0	4,0	2,0	2,0	2,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	27
38	34	31	31	31	19	18	17	17	17	17	17,0	11,0	298
6528	10210	5500	6615	3200	3676,31	4000	9870	6000	3000	3675	5546,00	4736,80	
3264	10210	2750	6615	28800	3676	4000	4935	3000	1500	3675	2773	0	75198
52224	112310	38500	46305	19200	3676	8000	19740	12000	6000	5513	8319	0	331787
48960	40840	57750	39690	16000	29410	16000	34545	21000	10500	12863	22184	23684,00	373426
26112	40840	22000	66150	16000	18382	32000	78960	48000	24000	29400	44368	0	446212
58752	102100	38500	33075	12800	11029	8000	19740	12000	6000	7350	11092	23684,00	344122
58752	40840	11000	13230	6400	3676	4000	9870	6000	3000	3675	5546	4736,80	165989
248064	347140	170500	205065	99200	69850	72000	167790	102000	51000	62475	94282	52104,80	1736734
1,00	0,58	0,60	1,15	0,60	0,60	0,20	0,60	0,20	0,20	0,20	0,84	0,90	
248064	201341	102300	235825	59520	41910	14400	100674	20400	10200	12495	78820	46895,20	1172844
TEC	TEC	STFR 0,60	TEC	STRF 0,60	STRF 0,60	STRF 0,60	STRF 0,60	FR 0,2	FR 0,20	STFR 0,6	TEC	TEC	TEC	
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	195000
7000				800									
3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	39000
62000													62000
583128,000	566481,200	290800,000	458890	177520,000	129760	104400,000	286464,000	140400,000	79200,000	92970,000	191101,752	116999,995	**3218114,521**
0,750	0,750	0,750	1	0,750	1	0,500	0,750	0,750	0,750	0,750	0,750	0,750	
189312,000	306300,000	159500,000	191835	92800,000	66174	68000,000	157920,000	96000,000	48000,000	58800,000	88736,000	47368,000	1570744,580
77000,000	15000,000	15000,000	15000	15800,000	15000	15000,000	15000,000	15000,000	15000,000	15000,000	15000,000	15000,000	257800,000
189312,000	177654,000	95700,000	220610	55680,000	39704	13600,000	94752,000	19200,000	9600,000	11760,000	74183,296	42631,996	1044387,690
455624,000	498954,000	270200,000	427445	164280,000	120878	96600,000	267672,000	130200,000	72600,000	85560,000	177919,296	104999,996	2872932,270
341718,000	374216	202650,000	320584	123210,000	90658	48300,000	200754,000	97650,000	54450,000	64170,000	133439,472	78749,997	2130549,202
58752,000	40840,000	11000,000	13230	6400,000	3676	4000,000	9870,000	6000,000	3000,000	3675,000	5546,000	4736,800	170726,110
10000,000	3000,000	3000,000	3000	3000,000	3000	3000,000	3000,000	3000,000	3000,000	3000,000	3000,000	3000,000	39000,000
58752,000	23687,200	6600,000	15215	3840,000	2206	800,000	5922,000	1200,000	600,000	735,000	4636,456	4263,200	128456,142
127504,000	67527,200	20600,000	31445	13240,000	8882	7800,000	18792,000	10200,000	6600,000	7410,000	13182,456	12000,000	345182,252
469222,000	441742,700	223250,000	352028	136450,000	99540	56100,000	219546,000	107850,000	61050,000	71580,000	146621,928	90749,996	**2475731,454**

Resources to be committed to the pilot projects

The project has an original goal and research design, but will be able to draw on resources from previous and ongoing projects. In particular, the pilot projects operated in work package 4 will be connected to other demand management efforts on a national level. Our plan is to involve demand management practitioners and policy makers (providing funding for the programmes) at an early stage in order to integrate the planned context-tailored pilot projects into ongoing energy efficiency and demand management programmes. This plan is facilitated by the inclusion of policy makers and government-level programme planners in the Policy Board on the project, and by informing these organisations of the planned work already when drafting this proposal. A separate budget of travel costs (EUR 7 000,-) is reserved for two meetings of the Policy Board.

Some of the pilots (4-6) will involve project partners as programme managers or will have external programme managers but intensive support from the project and a close evaluation (including collection of stakeholder feedback) after completion of the pilot programmes or projects. It is likely that the idea of piloting custom-tailored best practices raises a wide interest beyond the resources of the project. In this case, the remaining projects will be conducted quite independently, but will be provided distance support from the CHANGING BEHAVIOUR project where necessary. They will be included in the overall evaluation if they have gained sufficient experiences by the end of the present project. Continual contact will be maintained with all the intermediary organisations mobilised in WP3.

Resources to be committed to the workshops

In order to mobilise and network extensively with the community of energy-related intermediaries, five workshops will be organised. Four of these are organised in the context of WP3 to validate the conceptual model and analysis of best practices, and to select best practises for piloting. The fifth workshop will be organised within WP5 to validate and gain feedback on the Toolkit for Practitioners. The workshops will be open to all interested intermediary organisations, as well as their relevant stakeholders.

These workshops will require a separate budget of EUR 62 000,- , which is included in the budget of the CHANGING BEHAVIOUR project. The two-day workshops will be organised in four different regional centres, with part of the workshop facilitated in different languages in order to attract as wide a participation as possible. Funding will be provided for external intermediary organisations for moderate travel costs. We have calculated the following costs per workshop (estimated 20-40 participants per workshop):

- facilities (including webcast): EUR1 000,-
- material: EUR 250,-
- coffee and lunches: EUR 1000,-
- travel: EUR 10 000,-
- total: EUR 12 000,- –12 250,- per workshop

Resources to be committed to the Toolkit development

The development of the Toolkit is one of the core activities in WP5. A total of 55 man-months are allocated to this work package, which is led by ECN. Of this, about 16 man-months are estimated to be used for the evaluation and about 39 man-months for the Toolkit development. A detailed breakdown of the resources committed to the Toolkit development is provided below:

Task	Based on	Responsibilities and man-months													
		ECN	NCRC	SURF	OEKO	CEU	SEI-T	Cowi Baltic	Enespa	MKC	Green-Depen-dent	Eko-doma	VZ NRW	CRES	total
Toolkit core content development + examples & cases	Synthesis of WP2 results, feedback gained from intermediaries at workshops (WP3)	3	2	2	2	2	1	0,5	0,5	0,5	0,5	0,5	0,5	3	18
User requirements elicitation and user idea generation	Special session at the workshop for intermediaries	0,5	0,5	0,5	0	0	0	0	0	0	0	0	0	0,5	2
First draft version of the toolkit	The two previous steps	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Web implementation of the first draft version	Previous step	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Feedback on first draft version	Workshop for obtaining user feedback; web feedback collection	1	0,5	0,5	0	0	0	0	0	0	0	0	0	0,5	2,5
Integration of feedback into new version	Feedback obtained in the previous stage	0,5	0,5	0	0	0	0	0	0	0	0	0	0	0	1
Testing and localization /translation of the core content of final version	Partners from each country test & localize the final version, NCRC & ECN fix bugs	1	1	1	1	1	1	1	1	1	1	1	1	1	13
Development of customizable version	based on the generic toolkit	0	0,5	0	0	0	0	0	0	0	0	0	0	0	0,5
TOTAL		7	6	4	3	3	2	1,5	1,5	1,5	1,5	1,5	1,5	5	39

The Toolkit does not require new software development or programming. It can be based on existing web publishing tools such as WordPress and Joomla. Thus, the technical development of the tool can be done in-house at the National Consumer Research Centre, which has extensive experience of the development of web-based guides and discussion platforms. ECN will be responsible for the contents of the Toolkit and NCRC will be responsible for the technical execution (web design, web execution and administration). At the NCRC, Research Manager Petteri Repo has extensive experience in the development of user-friendly web-based information tools, and the NCRC staff will be complemented by a usability engineer in October 2007. The Toolkit will be maintained on the NCRC server.

Other specific budget items

A further EUR 800,- is budgeted for CEU to obtain a computer for constructing the online database in work package 1.

B3. IMPACT

B3.1 Expected impacts listed in the work programme

Key impacts of the project
The project addresses the topics of the FP7 Cooperation Work Programme Energy by contributing to a more sustainable energy economy through a novel mode of co-operation between researchers and practitioners, thus also contributing to the role of science in society. In particular, it will improve energy efficiency, as well as contribute to speeding up the deployment of a range of renewable energy technologies. It will do so by:

- **Providing knowledge tools for policy:** The project will provide important knowledge tools for future EU policies related to energy efficiency and demand reduction. It will enhance the competencies of key practitioners operating in the field, thus reinforcing the implementation mechanisms for energy-efficiency policies. Moreover, it will provide a database of effective modes of demand management, which will be necessary when moving the energy industry toward an energy services approach.

- **Improving knowledge of end-user behaviour and reaction to demand-side measures:** By evaluating existing programmes and providing new knowledge on energy-related behavioural changes, the project will significantly improve the current implementation of models, stakeholder participation methods and surveys to measure willingness to adopt more energy efficient behaviour and new energy technologies. The project will improve current knowledge and practice by enhancing existing models and methods with a sophisticated understanding of a broad range of drivers and obstacles to behavioural change, including the role of cultural and institutional context. Such a context-sensitive approach is important when considering the diversity of energy-related behaviour and contexts in different European countries.

- **Facilitating a shift toward energy end-use services:** The project will provide much-needed scientific support for a shift toward energy services. Such services constitute a very different mode of business from energy production, and require a much deeper understanding of end-user needs. The project will support a service shift by accelerating the transformational role of intermediaries in energy demand. Moreover, it will support the shift toward services by developing and disseminating sophisticated tools to explore end-user behaviour and respond to energy end-use service needs.

- **Enabling the exchange of best practices across cultural contexts:** The project will provide a knowledge base on the influence of cultural and institutional context on the outcomes of demand side measures. By applying this enhanced understanding of context to the exchange of best practices, the project will provide a systematic base for the exchange of experiences and context-tailored transfer of best practices.

- **Promoting dialogue between science and society:** The project will build on a dialogue between researchers, intermediary organisations and other stakeholders. It will demonstrate a new approach to programme evaluation and programme development in co-operation between academics and practitioners. Moreover, it will introduce novel modes for collecting user and stakeholder feedback and stimulating idea generation through open innovation.

The project will provide benefits for policy makers, intermediary organisations, the energy sector, energy end-users and providers of new energy technologies:

- **Policy makers** will benefit from the project through the implementation of better programmes, which will lead to a greater decrease in energy demand. The policy makers will further benefit through the toolkit that they can use to design more context-tailored demand programmes. They will also naturally benefit from the final report of the project and the dissemination of its conclusions. The conclusions will help to identify strengths and weaknesses, and transferable and non-transferable elements, in current demand management programmes. Moreover, the conclusions of the project will support a wider understanding of the scope, limits and conditions for demand reduction through demand management. The project will thus contribute significantly to policy design in the field of energy efficiency. In particular, the project will support the shifting of the European energy sector toward energy services.

- **Intermediary organizations** are the first beneficiaries of the project, but not the only ones. The participating intermediary organisations benefit immediately from the project through the implementation of better programmes and through organisational and inter-organisational learning owing to participation in the project. Other intermediary organizations and policy makers will benefit through the development and dissemination of the easy-to-use toolkit.

- **Energy sector:** the project will facilitate the adoption of demand management programmes among energy distributors, distribution system operators and retail energy sales companies by providing proven, effective and generally applicable tools for demand management and energy service provision. This is an explicit aim of the Green Paper on Energy Efficiency, and is integral to the system of White Certificates being introduced in a number of Member States. Such certificates require that energy companies meet a specified share of their demand through energy efficiency measures. The project will create improved conditions for enacting such policies by providing information on effective demand management programmes.

- **Energy end users:** the project will provide enhanced understanding of end user behaviour and promote improved methods of interaction with end users. This will lead to more effective and user-friendly demand management programmes. End users will receive programmes, information and services that are better tailored to their specific needs. Ultimately, this will enable end users to use energy more efficiently and sustainably, and will reduce the end-users' energy bills and environmental impacts in the long run.

- **European innovations in energy efficiency and end-user generation:** The project will promote the development and diffusion of energy efficient and renewable energy product and service innovations. The successful design and marketing of such technologies and the related services requires a good understanding of end-user behaviour, support networks for social and technical change, and the influence on contextual conditions on the adoption in different markets. By creating such knowledge and disseminating it in an easy-to-use format, the project will contribute to the competitiveness of European industries.

Ultimately, the project aims to contribute to better demand management programmes, and through them, to improved energy efficiency, increased use of renewable energy, and reduced carbon dioxide emissions. The achievement of these impacts is based on the assumption that

intermediary organisations will participate actively in the project. This assumption is well founded, as a number of intermediary organisations are involved as project partners, and others have expressed their interest in the workshops and other information exchange activities. Another assumption is that policy makers will take supportive measures in funding and supporting the appropriate and effective kinds of projects in the future. The CHANGING BEHAVIOUR project will contribute toward this development by disseminating the project findings and Toolkit as widely as possible to European policy makers and their stakeholders.

The Policy Board of the project is central in ensuring that the results will feed into the development of European policies. A number of policy makers and experts have already agreed to serve on the Policy Board.

Need for a European approach

A European approach is absolutely crucial to the project, as it deals with the exchange of best practices among European countries. In order to be effective, such transfer requires an improved understanding of similarities and differences among contextual conditions for demand management in different European contexts (see Table 3.1 for examples). The project aims, in particular, to consider best practices exchange between old and new Member States. The range of partners from different Member States will ensure that the most innovative practices, as well as a diversity of contextual conditions from different parts of Europe, are present in the project.

Table 3.1. Examples of some features of the energy system of countries participating in this proposal

	Finland	Nether-lands	UK	Germany	Estonia	Hungary	Lithuania	Latvia
Per capita CO_2 emissions, tonnes (1)	14.0	11.0	9.4	10.5	14.2	6.0	3.6	3.2
Energy intensity of the economy (kgoe/GDP95)(2)	273.7	209.3	207.2	158.8	1140.2	534.0	1135.6	696.3
Share of households, trade& services in total energy consumption, % (3)	34	44	42	47	54	59	49	58
Share of consumers reducing energy consumption for the environment, % (4)	37	54	42	50	39	23	16	33

(1) UN Millennium Indicators (3) Eurostat – Online database
(2) Eurostat – Energy-Yearly Statistics (4) Eurobarometer 2005. The Attitude of Europeans toward the environment.

The project also aims to not only research, but also initiate and stimulate the well-designed exchange of best practices, as well as to monitor and evaluate the outcomes of such exchanges, through intensive co-operation between researchers and practitioners. This cannot be done systematically without a common European project.

Connections to other ongoing national and international research activities
The proposed project has a number of connections to ongoing EU and international programmes and research projects. These include the current Intelligent Energy Europe Programme, various projects funded under the 6th and 7th Framework Programme and other programmes, such as the Energy Star Programme, GreenLight and GreenBuilding, ManagEnergy and Motor Challenge programmes. The project will network extensively with these programmes and projects, and can benefit from significant synergies. In particular, close contact and co-operation will be maintained with the BEHAVE project funded under the *Intelligent Energy* Programme.

In particular, connections will be built and maintained with the IEA DSM Programme. A number of tasks performed and reports issued by this programme have direct relevance for the CHANGING BEHAVIOUR project, especially Task XVI Competitive Energy Services. Information exchange and co-operation with the IEA DSM Programme will be ensured through IEA DSM representation on the Policy Board of the project.

There are also a number of other existing European and international forums enabling information exchange among demand management programme operators (e.g., the Sustainable Energy Europe Campaign, the EPBD Buildings Platform, Energy Trophy++ and CONCERTO). The CHANGING BEHAVIOUR project will engage in intensive co-operation with these forums, and where possible, will integrate project activities and outcomes into the existing structures. There are also a number of ongoing EU-funded research programmes, among others within the SAVE programme (most notably, the best practice technologies project), which will offer opportunities for mutually beneficial information exchange. Moreover, the project will co-operate and exchange information with the following ongoing projects:

- The Eurocontract (European Platform for the Promotion of Energy Performance Contracting) project under the Intelligent Energy Europe Programme (2005-2007). The project aims to contribute to the acceleration of the market for energy services in Europe in particular by further development of Energy Performance Contracting schemes in Europe.
- The Solar Thermal Energy Service Companies (ST-ESCOs) project supported by the Intelligent Energy Europe Programme (2005-2007), which promotes the creation and development of ESCOs working in the solar thermal field, in order to accelerate the growth of this market in Europe.
- The PU Benefs (Regional Market Preparation for Energy Efficiency Services in Public Buildings) project supported by the Intelligent Energy Europe Programme (2005-2007). The project intends to develop a suitable management framework for public bodies and especially local authorities to implement energy services including energy efficiency.
- The GreenBuilding Programme (GBP), which is a voluntary programme since 2005, which aims at enhancing the realisation of cost-effective energy efficiency potentials by creating awareness and providing information support and public recognition to companies whose top management is ready to show actual commitment to adopt energy efficient measures in non-residential buildings.
- The GreenLight Programme (similar to GBP), which was launched already in 2000. It is also a voluntary initiative encouraging non-residential electricity consumers (public and private) to commit to install energy-efficient lighting technologies in their facilities when either it is profitable and/or the lighting quality is maintained or improved.

The CHANGING BEHAVIOUR project will also take due account of existing information exchange and evaluation activities, e.g., the IEA Implementing Agreement for Demand Side Management. This forum represents a good example of information exchange and co-ordinated evaluation of innovative practices by leading countries. Nonetheless, the members of the IEA

DSM group are mainly from North and West Europe, and no New EU Member States participate in its activities.

The project also has connections to other national and international research activities. In the fields of energy efficiency and saving, partners participate in the ECEEE, SCORE and ERSCP forums. In the field of social studies of technology and human-technology interaction, the partners are active participants in national and international research networks (e.g., KSI, ESA-STSNet, TeknologiaNet). Interfacing with other ongoing research projects will be facilitated by active attendance at conferences.

Moreover, links will be established to other FP7 ENERGY projects in the topics ENERGY.2007.10.05 Energy behavioural change and ENERGY.2007.8.7.1 Promotion and dissemination (Energy efficiency). In particular, common interests and forms of co-operation will be sought with the *Science in Society* activity in the Capacities Programme.

B3.2 Dissemination and exploitation of project results and management of intellectual property

The consortium will define and propose to the responsible Project Officer (PO) for acceptance within the first 6 months a *realistic*, *coherent* and *consistent* Plan for the Use and Dissemination of Foreground.

General dissemination strategy

Dissemination is already integral to the research conducted in the project, in the form of joint workshops with intermediary organisations and organised user participation:

- A special series of workshops for both partner and non-partner intermediary organisations are planned in connection with Work Package 4, enabling a joint evaluation and identification of best practices. The consortium will mobilise intermediary organisations and other relevant stakeholders, including NGOs, by means of the workshops described under work package 4.
- Workshops will be organised in different parts of Europe and will feature working group sessions in different languages, to facilitate maximum participation of all relevant organisations. In connection with Work Package 5, a workshop for intermediary organisations will be arranged in order to invite ideas and feedback for the Toolkit design.
- Further participation of users and civil society at large will be solicited via the interactive website of the project, and in particular the Open Innovation Platform. The inclusion of a range of intermediary organisations as project partners will ensure that dissemination activities are appropriately targeted, and will provide suitable networks to access in each participating country.

Moreover, best use will be made of the newest Internet-based dissemination measures, such as Web 2.0, i.e., peer-to-peer networks:

- Peer-to-peer networks will be utilised to gain feedback on key programme features in the form of a questionnaire link fed into the relevant Internet discussion sites.
- Moreover, the project will set up an extensive openly accessible website, including an Open Innovation Platform for assessing innovative programme ideas as well as developing and tailoring innovative programme plans in a collaborative, open innovation process. Web-based questionnaires will be used to collect feedback on interim results of the project.

- The project co-ordinators will facilitate a web-based discussion forum that supports and augments the face-to-face interaction occurring at workshops and provide opportunities to obtain feedback from a broader range of stakeholders.
- Webcasts and workshop websites will be utilised to enable a broader participation of intermediary organisations and their stakeholders in project events.

The project website will remain operational throughout the project and for at least three years after the conclusion of the project. Project reports, the Toolkit for practitioners and results produced in the Open Innovation Platform and will be made available on the website.

The Toolkit developed for the context-tailored development of demand management programmes will enable the direct exploitation of the project results by demand management programmes. The Tookit will be developed in close co-operation with programme managers, and will be designed in terms of content and format to best meet their specific needs. While the immediate target group consists of intermediary organizations, the Toolkit will also be useful for energy distributors, distribution system operators and retail energy sales companies when shifting to selling energy services, e.g., efficient end-use, such as indoor thermal comfort, domestic hot water, refrigeration, etc.

The toolkit will be made publicly available over the Internet in the English language, and translations including special locally relevant additional information will be developed of the Toolkit in at least two other languages. Moreover, national-level energy agencies and related organisations will be requested to link the Toolkit to their websites. The toolkit and the results of this project will be disseminated to at least 5 targeted stakeholders per participating partner country involved in implementation of energy demand programmes. This will be done using nationally relevant contact forums, such as seminars, training events and professional associations.

The consortium undertakes the following actions as part of the project's Communication Action Plan for using and disseminating knowledge to all Member States during the lifetime of the project and afterwards:

- Establishment of the project website within the first month of the project, under the project's acronym with an extensive public and interactive section open to all Member States [10]
- Publications in scientific popular press.
- Publication in the daily/weekly press, specialized magazines and practitioner journals
- Issuing of press releases to local, national or international press at suitable occasions.
- Organization of media events such as press releases, conferences, workshops, information days, for example on the occasion of a project meeting, as well as ensuring access to such events via webcasts.
- Production and dissemination of information dedicated to appropriate media, e.g., a printed brochure, and newsletters.
- Participation at conferences under the condition that the project results are properly documented and disseminated.

In addition, the co-coordinator prepares and publishes a brief project presentation (PP) of approximately 2-3 pages in English and other language version if wished. It will be written in a

[10] Obligatory for all NoE, IP, STRPs. Additional guidance can be found on the web, such as at http://www.cordis.lu/eesd/web_require.htm

style that is accessible to the non-specialist, avoiding technical language, mathematical formulae and acronyms as much as possible. Photos, diagrams and other illustrative material will be included. The presentation may freely re-use material included in the Description of Work. Publication should be via the World Wide Web, and additional media may be agreed with the EC project officer. The EC services may publish the PP, and periodic updates of the PP will be carried out upon EC request. The PP deliverable is due in the third month of the project at the latest. A PowerPoint presentation reflecting the PP, project objectives, methodology and (expected) results should be also made available for public use. This will be updated each time the PP is updated.

Wherever appropriate, the EC contribution to the project will be properly acknowledged.

Detailed analytical dissemination plan

Today, project results and outputs have to compete for the attention of their targeted audiences. The CHANGING BEHAVIOUR project aims to tackle this challenge by specifying clear goals, messages, target audiences as well as sources and messengers. In particular, it addresses this challenge by involving target groups throughout the project and by making effective use of peer-to-peer networks and by systematically enrolling new messengers for the project.

Dissemination of the project outputs to policy makers and intermediary organisations is crucial for the CHANGING BEHAVIOUR project. This aspect is taken account of already in the design of the project. We expect to receive outstanding dissemination results because many of the target groups are involved in the project at various stages. We will utilize the local, national and international networks of the project partners and the Policy Board members to make sure our dissemination makes a differences and our results are actually used.

Dissemination goals: The overall goal of the project dissemination is to provide knowledge tools for policy makers and intermediary organisations to deal with the socio-technical change involved in demand side measures and to increase their capabilities to move the energy industry toward an energy services approach. This overall goal can be divided into the following short-term and supporting goals:

- raise interest in Changing Behaviour and raise awareness of the need for better knowledge of context, timing & actors
- involve policy makers, practitioners & their stakeholders in evaluating past success and failure, identifying best practices and conditions for their mobility, as well as in exchanging best practices
- empower policy makers and practitioners by providing them with a conceptual model that takes account of context, actors and timing and enables them to deal with end-users and stakeholders in an effective way
- identify expectations for Toolkit content, structure & format; raise awareness of the Toolkit, gain first Toolkit users; gain feedback from first Toolkit users; disseminate final version of Toolkit
- disseminate other project results (database of demand management projects, summary database of best and bad practices, synthesis report for policy makers, report on intermediaries in context, workshop reports, pilot project documentation, self-evaluation report).

Key messages: Different target audiences will have different interests in the Changing Behaviour project. The style and content of messages will be tailored to each target group. The overall key messages of the dissemination are as follows:

- How do different stakeholders influence the success of demand management programmes?
- Why are context, timing & actors important, what do they mean in demand management programmes, how do they influence project success?
- What are effective forms of target group and stakeholder interaction and participation in demand management programmes?
- What are key features of best practice programmes/projects and how are they sensitive to context?
- How can policy makers support better and more context-sensitive demand management programmes?
- What action should different parties take to enable successful programmes/projects?
- Why is it important to share information on successful and unsuccessful projects?
- How can the Changing Behaviour toolkit help in designing better projects and how can users tailor the toolkit to their needs?

Target audiences: The main users of the research can be divided into (1) practitioners (2) policy makers (3) programme/project stakeholders and (4) Related projects and networks, including international, transnational and national networks and organisations active in the field

1. Demand management practitioners/intermediary organisations
    - those involved as partners
    - those involved in the workshops for intermediary organisations
    - other demand management practitioners/intermediary organisations
    - NB: involves both ones directly working in energy efficiency/conservation and others with a broader "sustainability" focus (environmental consultancies, local development agencies)

2. Policy makers
    - government energy agencies (some represented on the project's Policy Board)
    - ministries and other government bodies directly in charge of energy policy and setting the framework for it through legislation, funding, etc. (some represented on the project's Policy Board)
    - other government bodies (other agencies and government bodies – e.g., technology funding, environmental protection, SME policy, consumer policy, etc.)
    - politicians and interest groups

3. Programme / project stakeholders
    - SMEs, municipalities and other energy-using organizations
    - households
    - NGOs, citizen groups & citizens
    - organizations providing information on energy use (NGOs, media, professional associations)
    - technology suppliers
    - the financial community

4. Related projects and networks: International, transnational and national networks and organisations active in the field, e.g.,:

- IEA DSM
- Intelligent Energy Europe Programmes
- Other programmes:e.g., Sustainable Energy Europe, EPBD Building Platform, Energy Trophy ++; Energy Star, GreenLight, GreenBuilding, ManagEnergy, Motor Challenge; ST_ESCO, PU Benefs
- Energie Cités, ICLEI and other international networks

Sources/messengers: Influential spokespersons are important to enhance the credibility of the message. Many important spokespersons are directly involved in the project:

- Participating practitioners & their networks. The practitioners involved in the project are active in their professional networks. They have a specific responsibility to disseminate the project to colleagues, customers, national and local policy makers and other local stakeholders.
- Policy Board members represent the policy stakeholders in the project. The aim is to increase the number of members on the Policy Board so that each participating country is represented.

Moreover, new spokespersons to support the message of the project will be enlisted throughout the project, in particular through the practitioner workshops, but also by participating in various international, national and local events. Through these measures, we will particularly target:

- Researchers and practitioners in related programmes and networks (i.e., e.g., IEA DSM, Intelligent Energy Europe, etc.)
- NGOs, professional groups and representatives of practitioner media (i.e., energy-related newsletters). Particular efforts will be made to have other energy-related disseminators to link the Changing Behaviour project to their websites and presentations.

Activities, channels, timing and responsibilities: the following table provides a detailed outline of dissemination activities, channels, timing and responsibilities:

	Channel	Primary target group	Timing	Responsibilities
Face-to-face	Policy Board	Policy makers	months 16-17; months 31-32	coordinator (organizer), WP leaders (presenters)
	Project partners (practitioners)	Intermediary organizations and other stakeholders in their local networks	throughout the project	practitioner partners inform other professionals and local stakeholders
	Workshops for intermediary organizations (4 workshops, 4 different regions, part of the work in different languages)	Intermediary organizations and other stakeholders	months 6-20	project partners (practitioners & researchers), each partner participates in at least one workshop, WP3 leader and co-ordinator in all
	Presentations at scientific & practitioner conferences and meetings organized by related networks and projects	Other practitioners and researchers; policy makers; related projects and networks	throughout the project and after it	each partner gives at least one presentation
	Presentations at events organized by NGOs, participation in fairs and events for the general public	General public, programme stakeholders, citizens	throughout the project and after it	each partner participates in at least one event
E-mail	Mailing list and newsfeed for intermediary organizations (both energy demand management and more general)	intermediary organizations identified in task 3.1 invited to the workshops	starting month 6 until the end of the project	coordinator organizes and manages technically, each partner participates
Web: informative	Project website: project summary, partners, aims, etc.	interested parties, esp. intermediary organizations & policy makers, related projects & networks	starting month 1	coordinator organizes (partners contribute to creating different language versions)
	Project outputs and reports (downloadable)	interested parties, esp. intermediary organizations & policy makers, related projects & networks	when completed & approved	coordinator organizes
	Workshop information in different languages	intermediaries invited to the workshops	starting month 6	coordinator organizes, all partners help in producing
Web: interactive	Discussion site	intermediary organizations and their stakeholders	starting month 6	coordinator organizes, moderates
	Open innovation platform	intermediary organizations and their stakeholders	starting month 10	coordinator organizes, moderates, all partners participate
	Toolkit: interactive first version (open for comments)	intermediary organizations and their stakeholders	months 32-34	WP 5 leader & coordinator organise
	Web surveys for practitioners and stakeholders	intermediary organizations invited to the workshop + stakeholders of the pilot projects	months 32-36	Coordinator & WP5 leader
Tookit	downloadable version (different languages)	intermediary organizations and policy makers	month 35	Coordinator & WP5 leader
	customizable platform version	intermediary organizations and policy makers	month 35	Coordinator & WP5 leader
	dissemination of the toolkit	intermediary organizations & policy makers	month 36	All partners, to at least 5 user organisations
Print media, TV, radio	Project brochure	interested parties; policy makers; related projects & networks	month 2	Coordinator, with input & feedback from partners
	Press releases, articles for/interviews given to the general public (national & local newspapers, TV, radio)	interested parties; policy makers, general public; local stakeholders	throughout the project	All partners (one in each language)
	Articles in/interviews given to practitioner journals	intermediary organizations, policy makers	throughout the project	All partners
	Articles in scientific journals	other researchers, policy makers	throughout the project	WP leaders, partners

Evaluation
The following measures will be used to evaluate the output (and in some cases, outcome) of the dissemination:

Evaluation criterion	Target
Number of Policy Board members	10
Number of workshop participants (in total)	100
Number of presentations at conferences	20
Number of presentations for the general public	20
Number of mailing list recipients	200
Number of visitors on the project website	60 000
Number of entries in the discussion site and Open Innovation Platform	300
Continued growth of the website discussants' community	20% growth per year
Dissemination of the Toolkit and results of the project	at least 5 targeted users/stakeholders in each participating country
Total number of registered Toolkit users	100
Number of published articles on the project (general public & practitioner)	40
Number of published articles (scientific)	10
User and stakeholder satisfaction as measured by website survey	number of respondents 200

Communication and exchange of information among partners

Communication and exchange of information among partners will be by:

1. Intensive face-to-face communication through the regular meetings and workshops.
2. Bimonthly electronic meetings of the work package leaders
3. Direct communication of all project partners through electronic mail as and when necessary.
4. Through the partners' website (extranet) operational within the first three months, under the project's acronym, for distribution and management of project documents that will be made available in electronic format to partners only.

Internal project workshops will coincide with milestones. They will allow the different participants to have a general view of the progress of the project. The organisation of workshops in the different countries will allow the project partners:

- To better understand the specific national needs and barriers with respect to demand management in specific regions against the European background
- To estimate under what conditions the results and basic data of the study can be transferred from one context to another with a view to assessing the probability and time line of introducing an energy efficient society in that region.

Data security and management of intellectual property

Appropriate procedures will be applied to the protection of data security, securing confidentiality of information that is not meant to be disclosed, and the management of pre-existing (background) and new (foreground) knowledge developed in the project. These will be

set out in the consortium agreement among partners, which will also specify a procedure for the resolution of potential conflicts.

There are no problematic issues foreseen dealing with intellectual property rights. All knowledge and the tool generated in this project will become publicly available at the end of the project. Partners will retain intellectual property rights to any background knowledge that they have mobilised for the use of the project. More detailed rules on intellectual property right issues in the project are included in the Consortium Agreement. Stakeholders contributing to the Open Innovation Platform will be duly informed of the collective nature of ideas and concepts generated there.

B4. Ethical issues

Informed consent and data protection
All participants will engage in the project on a voluntary basis. This pertains in particular to the intermediary organisations, which will be duly informed of the procedures applied in the project and the formats for publishing the results. Where necessary, they will be provided the opportunity to check any data concerning programmes operated by them prior to publication. Stakeholders and end-users will also participate on a voluntary basis, and will be appropriately informed of the research, participation, data security and disclosure procedures.

Data protection issues will be given serious attention. The collection and use of personal data will be avoided. Interviews will be reported without disclosing personal data. Data collected during the project will be handled with due attention to the protection of any personal information. When using the interactive website and Open Innovation Platform, participants will be informed of procedures for protecting personal data, and participants' IP addresses will not be recorded.

Other ethical issues
The project does not involve use of animals or human embryonic stem cells.

ETHICAL ISSUES TABLE

	YES	NO
Informed consent		
• Does the proposal involve children?		x
• Does the proposal involve patients or persons not able to give consent?		x
• Does the proposal involve adult healthy volunteers?		x
• Does the proposal involve Human Genetic Material?		x
• Does the proposal involve Human biological samples?		x
• Does the proposal involve Human data collection?		x
Research on Human embryo/foetus		x
• Does the proposal involve Human Embryos?		x
• Does the proposal involve Human Foetal Tissue / Cells?		x
• Does the proposal involve Human Embryonic Stem Cells?		x
Privacy		
• Does the proposal involve processing of genetic information or personal data (e.g., health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)		x
• Does the proposal involve tracking the location or observation of people?		x
Research on animals		
• Does the proposal involve research on animals?		x
• Are those animals transgenic small laboratory animals?		x
• Are those animals transgenic farm animals?		x
• Are those animals cloning farm animals?		x
• Are those animals non-human primates?		x
Research Involving Developing Countries		
• Use of local resources (genetic, animal, plant, etc.)		x
• Benefit to local community (capacity building ie. access to healthcare, education, etc.)		x
Dual Use		
• Research having potential military / terrorist applications		x
I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	**X**	

B5. Consideration of gender aspects

In the scientific management of this project women are directly involved. Women are also directly involved in the scientific partnership as scientific team leaders in the project.

Moreover, gender is also included in the research design as a highlighted factor when examining the target-group responsiveness of behavioural change programmes. The project will thus raise awareness of gender issues in the energy efficiency and demand management community at large.

In this project, 13 staff members involved in the project are women. Women are leaders in four (4) of the six work packages.

The gender issues will be monitored by the project coordinator through the life of the project, and reported to the EC. The number of women scientists specified above is based on the current key personnel of the partner organisations that will be involved in the project. We will encourage women's participation in research both as scientists/technologists and within the implementation and evaluation process. In addition we will emphasis men's needs, and the fact

that enhanced understanding of gender issues must be obtained where relevant to the project. The importance of gender equality and promotion of female participation in the project will be addressed on the project website and stressed in dissemination activities. This project's consortium will further stimulate equality amongst others by means of promoting female participation when opening new positions for researchers. Each partner will follow a policy for equal treatment.