Overview on Public Benefit Campaigns to Promote Energy Conservation and Energy Efficiency ¹

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I. Introduction

Public awareness and public benefit campaigns constitute an important element to support energy conservation and energy efficiency promotion policies and programmes. By definition, public benefit campaigns are mostly non-commercial in nature. Therefore, most public awareness and public benefit campaigns are designed and implemented by government agencies or by concerned non-governmental or civil society groups. In many cases, campaigns are supported by volunteers. In some countries, private companies also support public energy efficiency awareness campaigns and/or the dissemination of their messages.

Public awareness and public benefit campaigns play an important role in raising awareness of the public and in drawing public attention to the risks or advantages of certain behaviour. For instance, the promotion of public safety and public health relies to a large degree on public benefit campaigns. Examples include public awareness campaigns that call for "safe driving", for the "avoidance of alcohol or drugs when driving cars or operating machinery", for the "wearing of seat belts" in private cars or public transportation, for the "wearing of helmets" on bicycles or construction sites, for "prophylactic medical check-ups" etc. "No-smoking" campaigns also fall into the category of public awareness and public benefit campaigning. Public awareness and public benefit campaigns draw the attention of consumers to the risks of accidents or to the "internal"/personal and "external"/public costs of certain behaviour or consumption.

 $^{^{1}}$ This paper was prepared to serve as background information and a discussion paper for $\it the\ United$ Nations Forum on Energy Efficiency and Energy Security: Taking Collaborative Action on Mitigation Climate Change (Seoul, Republic of Korea, 17-18 December 2007). The paper provides an overview of national energy conservation and energy efficiency campaigns that have been conducted in various industrialized and developing countries during recent years. It does not discuss public benefit campaigns conducted in China, Thailand or Macao, S.A.R. of China, as these campaigns were presented at the UN Forum by other experts.

The paper presents the views of the author only. It was issued without formal editing.

Public benefit campaigning has played a crucial role for the propagation of certain behaviour patterns of consumers in many countries. When seat belts were first introduced to reduce injuries of motor vehicle passengers in accidents, the public was often unaware of their advantages and reluctant to accept their installation and use. During the 1960s and 1970s the use of seats belts in cars was increasingly mandated by law, and fines were introduced to penalize non-compliance with safe driving legislation. Today, the use of seat belts is a common practice in most industrialized countries, and injuries from accidents have been greatly reduced. Public awareness campaigning has greatly contributed to such success.²

During the past decade public concerns on the externalities of growing energy consumption have increased significantly. Energy production and use, in particular energy production based on fossil fuels, as well as electricity production and use based or nuclear energy, causes emissions that can be harmful to the environment and to human health. In addition to concerns over local, national, regional as well as trans-boundary air pollution, growing concerns over climate change and its possible negative impacts have motivated energy saving, energy conservation and energy efficiency promotion policies in many countries.

During recent year concerns over energy security have been given additional attention, in particular in countries that rely increasingly on imports to meet their growing domestic energy demand.

Today, the role and potential contribution of public awareness campaigning to promote a more rational use of energy is widely recognized in many countries. However, only limited research has been undertaken to survey the tools available for public benefit campaigning and to study their relative cost-effectiveness.

Public benefit campaigns aimed at raising consumer awareness of the costs and environmental impacts associated with energy consumption address a variety of stakeholders, primarily energy consumers, but also children (future energy consumers), educators (educating/ training/ propagating consumer values/ attitudes and consumptions patterns in future will-be energy users), manufacturers and other businesses, as well as government agencies.

² Some recent analysis suggests that recent public awareness campaigns for seat belt usage using cartoon characters / crash test dummies "Vince and Larry" was particularly popular and successful in the United States. Seat belt usage has reportedly increased from 21 to 70 per cent.

Public awareness and public benefit campaigns encourage their target groups and participants to review and possibly change their values / behaviour / consumer habits or even lifestyles.

Most awareness creation campaigns suggest practical and simple actions to save energy in daily life. Whereas in most cases the saving or conservation of energy requires little or no particular investments, a transition to greater energy efficiency often requires some form of investment in new and more efficient appliances, equipment or technology. Public benefit campaigns that seek to promote greater energy efficiency typically advocate the necessary investment decisions.

Multi-stakeholder cooperation has a particular role to play in making campaigning for energy efficiency more successful. It is observed that financial and other investment incentives can play an important role in mobilizing the necessary private investments.

Each country faces different challenges when it comes to the provision of energy for sustainable development. Energy and energy efficiency policy approaches as well as regulatory frameworks vary from country to country as do public benefit campaign concepts. This paper has been commissioned and aims to provide an introductory overview of the various approaches that are being used. The overview and the documentation and the sharing of information is intended to encourage, motivate and facilitate the eventual replication of campaign concepts by other organizations, for other product categories or in other countries. Greater international cooperation in public benefit campaigning for energy conservation and energy efficiency could result not only in reduced energy costs or better services, but also in reduced energy security risks and lower environmental impacts, including lower emissions of greenhouse gases per unit of production or consumption.

II. Typology of Issues in Public Benefit Campaigns

Public benefit campaigns to promote energy conservation and/or energy efficiency can be categorized in various ways, depending on their priority objectives, target groups / target audiences, strategies or means of communication.

(a) Energy Conservation and Energy Efficiency Campaigns

Whereas the concepts of *energy saving* and/or *energy conservation* (or resource conservation) refer to and aim at reductions of energy consumption (e.g. "calls for switching off lights or other electrical equipment in rooms that are temporarily not used") and do not necessarily require any form of investment or equipment replacement, the promotion of "energy efficiency" typically requires some form of investment in new technology, equipment or processes.

Public benefit campaigns advocating energy saving or energy conservation would typically highlight the costs of energy saved by the consumer, and the associated avoided environmental impacts. Public benefit campaigns advocating energy efficiency would need to be designed in a manner that convinces energy users of the (longer-term) financial gains or net cost reductions (after the amortization of initial investment / procurement costs of new energy efficient equipment). Campaigns that advocate investments in energy efficiency may need to be accompanied by some form of financial incentives in order to be successful.

Recent increases in oil and energy prices have created renewed interest in energy conservation and in energy efficiency. In some countries, high and/or increased energy import dependence and economic instability has also lead to greater awareness of energy security concerns.

Energy efficiency campaigns that target large scale energy users such as energy intensive enterprises or commercial buildings are often combined with programmes that mandate periodical energy audits.

(b) Content of public awareness campaigns for energy conservation / efficiency

Public benefit campaigns typically seek to draw attention to the economic and the environmental advantages of rational use of energy. In many industrial or other commercial enterprises energy costs only account for a limited or small portion of total costs. Hence, in comparison with other cost saving potentials, energy cost reduction potentials are often overlooked and remain unrealized. Similarly, in modern households in industrialized countries, the use of modern forms of energy often only accounts for a limited portion of total household expenditure. This also explains the widespread lack of attention to aspects of energy use.

Most public awareness / public benefit campaigns seek to draw the attention of energy users not only to the economic advantages of lower energy costs, but also to the environmental impacts that are associated with the continuously growing energy use, in particular in industrialized and industrializing countries and in urban areas. Many of the public benefit campaigns emphasize

the message that greater consciousness and efficiency in energy use can enhance the quality of life in society as a whole.

Most of the public benefit campaigns focus on giving energy consumers easy tips for avoiding unnecessary energy use and energy costs by changing some of habitual consumption patterns. Other campaigns are broader in their public information message. Some campaigns highlight energy efficiency as one aspect of product quality. Again other campaigns are designed to accompany the introduction of energy efficiency or environmental labels that are voluntary in some countries and mandatory in others. Aspects of comparison energy efficiency labeling are discussed later in this paper.

(c) Definition of target groups / target audiences

Energy saving and energy efficiency campaigns can also be categorized or differentiated by the type of target group. Public information and public benefit campaigns are designed and implemented differently depending on the definition of the target group which can include households and private consumers, commercial businesses or offices, Government agencies or other energy user groups. Many countries have identified children and youth as target groups for public information campaigns that are often conducted in schools or other educational institutions. In many countries that conduct public benefit and public education campaign in their schools essay writing or painting or drawing contests are among the various educational tools used.

Some campaigns target adolescents and students in their advocacy for more energy conscious consumption patterns. ³ The "Go Cold Turkey" campaign implemented by the University of Wisconsin urges students to sign a pledge to promise that they would turn off their electronic appliances when not in use for some time. ⁴ This programme appears to be quite popular among students and youth and its success in bringing about effective lifestyle changes in consumers has been subject of some monitoring, analysis and reporting in recent years.

(d) Institutional arrangements

³ University of Wisconsin (UW) - MADISON Energy Initiative with a target of 20 per cent reduction in energy use by 2010 (for details see www.conserve.wisc.edu.)

For further information on the "Go Cold Turkey" Campaign please also see the Harvard Crimson. Online edition by Yingzhen Zhang, published on December 2, 2002.

Institutional arrangements vary from country to country and different types of mostly public organizations and institutions engage in the design and the implementation of energy efficiency / energy saving campaigns. In some countries campaigns are conducted nation-wide based on national policy initiatives of government authorities or Ministries. The Government of China, for example, has in recently years stepped up its campaigning and public information programmes to enhance greater efficiency in energy use. Similarly, the Government of India has in recent years initiated comprehensive nation-wide campaigns that are launched, supported and monitored by the Bureau for Energy Efficiency (BEE) operating under the Ministry of Power. In India, the Energy Conservation Act 2001 and the Electricity Act 2003 provide the legal basis, inter alia, for public information campaigning. Detailed information on the national programmes aimed at enhancing energy efficiency can be obtained from the relevant webpages.

In some countries public information and public benefit campaigns are mainly conducted by the (public) utility companies as a part of their demand side management (DSM) programmes. It can be observed that in some countries, with the increasing privatization of public utilities during the 1980s and 1990s, energy saving and energy efficiency programmes supported or implemented by (previously public) utilities have, at least temporarily, received lesser attention, funding and support.

Non-governmental organizations and civil society groups concerned with environmental protection are also found to initiate and mobilize support for energy conservation and energy efficiency campaigns.

(e) Use of media and communication strategies

Modern public information and public benefit campaigns rely primarily on modern media and means of communication to disseminate their messages. Although television, radio and newspaper advertising tends to be more costly than disseminating public information messages via bulletin or advertisement boards, they also reach a much wider public audience and tend to receive greater attention. In some countries private sector sponsors associate themselves with and support public benefit campaigns by underwriting some or all of their advertisement costs.

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⁵ Chinese Vice-President Zeng Qinghong called for public energy saving awareness. For detailed information see also www.xinhuanet.com.

In some countries cartoon characters are created and used to popularize public information messages on energy conservation and energy efficiency. Some organizations use other effective tools, such as specialized calendars, buttons, stickers or other items to disseminate their messages.

III. Selected examples of public benefit campaigns to promote energy saving and energy efficiency

This section of the paper presents short summary profiles of a number of selected recently completed or on-going public benefit campaigns that aim to enhance sustainable development through their advocacy of rational use of energy. The overview includes campaigns conducted in both, industrialized and developing countries. National approaches to energy conservation and energy efficiency campaigning differ from country to country. The objective of the overview is to facilitate the exchange of information between countries, involving all of the various stakeholders including energy policy makers, campaign organizers and supporters.

Advocacy programmes for energy conservation in the Republic of Korea: Leadership by the Government 6

The economy of the Republic of Korea relies to a large degree on imported energy. The Government of the Republic of Korea and its Ministry of Commerce, Industry and Energy (MoCIE) has, therefore, placed great emphasis on increasing the country's energy security and its resilience to global energy market instability. Following the global oil price shocks of the 1970s the Republic of Korea was among the first countries to introduce dedicated legislation to enhance the rational use of energy. Various subsidiary and independent organizations have been established to promote energy saving and energy efficiency throughout the country, including the Korea Energy Management Corporation (KEMCO), as well as consumer information campaigns.

The Korea Energy Management Corporation (KEMCO) provides training and technical advisory services on rational use of energy, in particular targeting large-scale industrial and institutional energy users. Periodical energy auditing is conducted in many enterprises every year with a view to identify feasible energy efficiency investment opportunities. KEMCO also facilitates the financing of modernization and productivity improvement projects. The Government of the Republic of Korea has launched a special "Fund for the Rational Use of Energy" that provides

⁶ Campaign's official website is http://allim.go.kr (in Korean)

long-term investment financing at low / subsidized interest rates to encourage energy efficiency and conservation investment.

KEMCO is also the leading implementing agency for other programmes that seek to enhance efficiency of energy use in private households. In a recent MoCIE / KEMCO campaign some 30,000 households were encouraged to install energy efficient compact fluorescent light (CFL) bulbs. A compact fluorescent light bulb uses less energy than an incandescent bulb to produce the same amount of light. In order to support public acceptance of the CFLs the Ministry of Commerce, Industry and Energy and KEMCO used vouchers (worth 6,000 Korean Won each) to subsidize the costs of the CFLs and to promote their widespread installation and use.

Figure 1: Public Benefit Campaigning In Republic of Korea: Promotion of energy saving consumer behaviour and 3+6=9 energy saving tips



(Source: Ministry of Commerce, Industry and Energy, April 18, 2006)

In addition to its other efforts to promote energy conservation and energy efficiency the Government of the Republic of Korea has also been supporting a comprehensive public awareness creation campaign that advocates a variety of easy ways for consumers to save energy. The pamphlet shown in Figure 1 seeks to encourage consumers to follow 3 easy energy saving tips. The pamphlet also draws attention to 6 other opportunities for consumers to save energy. The 3 easy energy saving tips are a) turning off the lights when not needed, b) turning off computers when not in use, and c) participate in a programme aimed at reducing the use of private cars on selected dates. The 6 other measures promoted by the energy saving campaign

⁷ 2007 The Need Project, Intermediate Energy Infobook page 49

include a) keeping the indoor temperature in the home to 26-28°C in summer (avoiding excessive energy use in air-conditioning); b) walking on foot for short distances; c) avoiding to keep automobile engines on if not driving, d) not overloading luggage in trunk of car, e) avoid ironing clothes if not necessary, and f) reducing to time of cooking rice with using a rice-cooker. The campaign organizers have calculated that implementation of these energy saving tips could save the Korean economy electricity use of some 70 GWh annually, equivalent to imports of 10 million barrels of oil. Even if not all Korean consumers follow all of the recommendations the aggregate amount of electricity and oil saved annually and the avoided emissions are indeed very substantial.

Energy efficiency award programmes: Promoting investment in energy efficiency and consumer preference for energy efficient products

The Citizen's Alliance for Consumer Protection of Korea (CACPK) is a non-governmental organization in the Republic of Korea which has initiated a new type of energy efficiency campaigns entitled "Energy Winner Award" programmes. This campaign effort is organized in cooperation with and with the support of a major daily newspaper in Korea (Hankuk-Ilbo). ⁸ Government Ministries, including the Ministry of Commerce, Industry and Energy (MoCIE) and the Ministry of Environment (MoE) and Korea Energy Management Corporation (KEMCO) are also lending their support to the "Energy Winner" award campaign.

Figure 2: The Annual "Energy Winner" Award in Republic of Korea



(Source: Citizen's Alliance for Consumers Korea, CACPK, 2008)

⁸ For further information please see http://www.cacpk.org/main.php (in Korean). CACPK is the leading implementing agency conducting the National Energy Efficiency Award Programme ("Energy Winner Programme") in the Republic of Korea.

The Sustainable Energy Campaign of Citizen's Alliance for Consumer Protection of Korea (CACPK) began in 1994. CACPK initiated research on "Consumer attitudes and practice of energy conservation" in 1994, which revealed that young consumers are unaware of energy conservation. In 1995, CACPK organized nationwide education programmes with an initial outreach to 3,900 young consumers. In 1996, CACPK initiated the Republic of Korea's first signing of an agreement with four major household electrical appliance manufacturers to increase the energy efficiency of their products. During that same year CACPK also carried out a consumer information campaign to promote the production of and demand for energy efficient products. CACPK launched a comparative testing programme analyzing the energy efficiency of washing machines, refrigerators, rice cookers, irons and other appliances. In 1997, CACPK organized its first nationwide National Energy Efficiency Award programme (locally known in Republic of Korea under the name "Energy Winner") as a culmination of these activities. The "Energy Winner Award" is an annual prize awarded to outstanding products or manufacturers who produce more energy-efficient products and develop new technology to conserve energy.⁹ Over the years a total of 182 companies / products were awarded the "Energy Winner" prize in various product categories, including electrical appliances, lighting systems, buildings, motor vehicles and energy conserving lifestyles. Since 2001 a separate "Carbon Dioxide Reduction Award" programme was also launched.

The "Energy Winner" award programme is a form of a voluntary initiative launched by a consumer association. The programme does not provide any financial awards. However, awardees are allowed to use the award logo on their products and in their advertisements for a certain period of time. This attracts consumers and creates energy efficiency awareness in the market. Many manufacturers and private citizen groups are attracted to participate in the programme on a voluntary basis. The "Energy Winner" label seeks to create consumer preference for energy efficiency and for energy efficient products. Every year many companies and other institutions compete for the 'Energy Winner" label to improve the marketing of their products.

The "Energy Winner" award programme provides a model for NGO campaigning for energy efficiency that could also be used or replicated in other countries. The "Energy Winner"

http://www.unescap.org/esd/energy/publications/psec/guidebook-part-three-energy-winner-awards.htm , United Nations Economic and Social Commission for Asia and the Pacific; Guidebook on Promotion of Sustainable Energy Consumption: Consumer Organizations and Efficient Energy Use in the Residential Sector: PART 3

programme has many direct and indirect benefits: a) More efficient use of energy is a cost effective way to prevent energy shortages and reduce environmental impacts; b) Thus, the programme eases economic and environmental impacts and reduces energy waste; c) The programme encourages and increase the production and consumption of energy-efficient products and, thus, also has an economic stimulation impact; d) The programme increases the dissemination of energy saving products and systems, and e) it promotes an consumer movement and more widespread public recognition of the advantages of energy efficiency in the market place, thereby contributing to sustainable development.

The "Energy Winner" award programme encourages product development and product improvement. The programme could, however, also be regarded as a voluntary environmental labeling programme which would fall under regulation of the "Environmental Technology Development and Support Act" (환경기술개발및지원에관한 법률). The Ministry of Environment had drawn up this legislation and the Korea Eco Products Institute (KOECO) has been entrusted with its implementation. Eco labels have an important role to play in efforts to enhance market transformation towards more sustainable patterns of production and consumption. However, in countries that have more than one nationwide eco-labeling programme it is important to avoid to confuse consumers and to ensure legality and absolute accuracy of all labels used.

Examples of independent NGO campaigns: The campaign for reduction of indoor heating during winter periods in Republic of Korea¹⁰

Figure 3: "Wearing warm underwear can help save energy"



(Source: Korea NGO's Energy Network, November 2006, Gangneung YWCA, November 29, 2007)

 10 For detailed information on the NGO network for energy efficiency campaigning in Republic of Korea please see also : $\underline{\mathbf{www.greenkorea.org/}}$

The documentation presented under Figure 3 illustrates recent campaigns organized by a network of environmentally concerned non-governmental organizations in the Republic of Korea. The main low-cost campaign tool are public information stands, exhibits and street campaigns aimed at making the public more aware of the various easy ways of saving energy in daily life, in particular also during the winter season. The "wearing warm underwear can help save energy" campaign is a "bottom-up" or "grass-root" campaign initiative organized by a network of non-governmental organizations (NGO). It is observed that lowing indoor heating during winter periods can save much energy. It has been estimated that in the Republic of Korea the lowering of indoor temperature by 1°C could as much as US\$ 23 million in annual energy import costs.

With comfortable thermal underwear heating needs could be reduced significantly.

Voluntary campaigns can increase consumer awareness of the importance and the potentials of energy saving. Non-governmental organizations have an important role to play in complementing public information campaign initiatives of the government. However, NGO typically lack the necessary financial resources to support, expand and sustain their campaign initiatives. In the Republic of Korea new legislation has been discussed during recent years and a new law is expected to come into effect in August 2008 entitled "Energy Law" 11. This new law includes a provision under which NGOs will be eligible to apply for public funding support if their campaigns are considered important and likely effective in further enhancing energy savings and energy efficiency. The introduction of the new law will certainly improve and up-grade the role that NGOs can play in promoting rational use of energy in the Republic of Korea. However, the issue of establishing clear criteria for project / campaign selection and for assessing their performance and their impact will still need to be addressed.

Sustainable Energy Europe 2005-2008: An example of intra-regional cooperation in coordinated campaigning for energy conservation and energy efficiency¹²

Since 2000, the European Union (EU) has adopted a number of legislative measures to foster the market penetration of both renewable and energy efficient technologies.¹³ Today, there is a

¹¹ The National Assembly transferred to the government and declared "Energy Law", in Article 258, 2006. The NGO energy network participated in the drafting of the "Energy Law" with a view to enhance prospects for improved public funding support in the future. The discussion is documented under http://www.enet.or.kr (in Korean)

For detailed information see also www.sustenergy.org

¹³ http://europa.eu.int/pol/ener/index_en.htm

common understanding among the EU Member States that energy production and consumption patterns need to become more sustainable with lesser negative impacts for the environment. In spite of continuing technological advances over the past several years, there is still great scope for further energy efficiency improvements throughout Europe. In June 2005, the Commission adopted a "Green Paper on Energy Efficiency" entitled "Doing more with less." The paper highlights various energy conservation and energy efficiency opportunities and calls for national initiatives to harness cost-effective energy savings for Europe equivalent to 20 per cent of the EU current energy use, which is expected to result in the reduction of energy imports, innovation and job creation.

The European Commission has developed the sustainable energy partnership composed of local, regional and national authorities, industry and energy agencies, associations, and non-governmental organizations. The partnership invites members with a strong interest in and commitment to transferring technical or managerial know-how on sustainable and efficient production and use of energy. The partnership emphasizes public awareness creation and effective communication though the use of public media. The programme was launched for a four year period, covering the period from 2005 to 2008.

The specific objectives of the Sustainable Energy Europe 2005-2008 campaign are to a) raise the awareness of decision-makers at local, regional, national and European level; b) disseminate information on "best practices"; c) ensure a strong level of public awareness, understanding and support; and d) stimulate increased private investment in sustainable energy technologies.



Figure 4: The Sustainable Energy Europe Campaign Logo

Partners in the Europe-wide campaign effort are given exclusive rights to use the campaign logo for any communication concerning their programme or project. Partners also receive guidelines

and promotional materials that can support their individual campaign efforts. Individual campaigns that meet all require criteria are officially acknowledged and included in an annual catalogue that describes all partnership programmes or projects. In addition, the network facilitates regional and inter-institutional exchanges of experiences, inter alia, through a bi-annual newsletter which showcases campaign profiles and project results. European-level networking is also facilitated via an annual conference and annual competition.

Becoming a partner or member in the Sustainable Energy Europe partnership represents a voluntary expression of commitment to the overall objectives of the campaign. Active participants in the region-wide energy conservation and energy efficiency campaign effort also benefit from a variety of support services and tools made available by the European Commission, as well as co-operation schemes between Sustainable Energy Partners.

Public benefit campaigning for energy conservation and energy efficiency in Germany: A focus on awareness creation and consumer education¹⁴

Since 2002, the Government of Germany, through its Federal Ministry of Economy (Bundesministerium for Wirtschaft) and the German Energy Agency (Deutsche Energieagentur - DEnA) has developed an initiative entitled "Energy Efficiency Pays Off" which is also cosponsored by several utility companies, including EnBW, E.ON, RWE and Vattenfall Europe.

The German energy efficiency initiative (Initiative EnergieEffizienz) conducted by the German Energy Agency (DEnA) provides a platform for interaction and cooperation aimed at improving the efficiency in electricity in all energy end use sectors. DEnA provides comprehensive information and advice as well as support for campaigns and projects throughout Germany targeting energy end users in private households, in trade and industry and in the service sector. Its methods of disseminating information on energy efficiency potentials include the organization of workshops on particular questions related to the rational use of electricity.

The campaign's spectrum of topics covers all types of electrical home appliances, also including lighting systems and home entertainment appliances, some of which tend to consume considerable electricity even if only in stand-by mode. DEnA has launched a number of

¹⁴ The official website of the campaign is <u>www.initiative-energieffizienz.de</u>.

innovative public information campaigns aimed at increasing public awareness of energy saving potentials. In order to communicate effectively with a large public audience DEnA has invited filmmakers and advertisement companies to produce short but attractive and informative TV advertisements. The public benefit advertisements that were considered best by an independent jury can be seen on the DEnA webpage: www.stromeffizienz.de.

DEnA is also exploring other tools for effective public information campaigning, including interactive websites, including websites that encourage users to calculate their energy costs or emissions and provide related tools, educational quizzes and other measures. DEnA is also participating in and supporting the "Office-TopTen Initiative" which mainly addresses companies and institutions with the aim to raise their awareness of and preference for energy efficient office equipment.¹⁵

Promotion of energy saving and energy efficiency in France: Energy Saving Certificates - Diagnostic de Performance Energetique

Within the framework of EU sustainable energy promotion policies the Government of France is also actively seeking to promote energy conservation and energy efficiency, in particular through the work of the French Energy Management Agency (ADEME). ¹⁶ The energy policy in France seeks to significantly reduce CO₂ emissions by 2050. It also aims at an average reduction of energy intensity of at least 2 per cent per year between 2015 to 2030. In the near term, the Government of France plan to meet 10 per cent of the country's energy needs from renewable energy sources by 2010. It is planned to increase the use of bio-fuels to 7 per cent of transport energy use by 2010. Promotion of energy efficiency and energy auditing also plays a key role in the ADEME programme.

As in several other European countries France has introduced a variety of new policies and measures aimed at reducing greenhouse gas emissions. The government compels energy providers (electricity, gas, LPG, oil, for heating and cooling systems) like EDF and Gaz de France to reduce energy consumption over a given period and to make energy savings via their customers. Providers are free to decide what type of action to implement in pursuit of this objective: informing customers on how they can reduce their energy consumption, running

¹⁵ www.office-topten.de

¹⁶ For detailed information please see also <u>www.ademe.fr</u>

promotions in association with equipment retailers or the like. If the set targets are met in time, providers will receive certificates as an attestation of the total savings achieved. On the other hand, providers will be fined by the treasury if they fail to meet their targets. In addition to the national certification scheme the Government also uses its fiscal policy to provide a variety of financial incentives for investments in energy efficiency projects.

Making energy saving popular: the "Energy Hog" Cartoon Character in the United States ¹⁷

In the United States, "The Alliance to Save Energy" (ASE) and various other public and private institutions are seeking to promote energy saving and energy efficiency, inter alia through public information and public benefits campaigns. Special advertisement skills are being used in order to make the "save energy – protect the environment" message popular and attractive. In this context the use of the "Energy Hog" cartoon character play a particular role.



Figure 5: The "Energy Hog" character in the United States

(Source: www.energyhog.org)

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¹⁷ The official website of Energy Hog campaign is available at www.energyhog.org, The Energy Hog campaign was founded by "Energy Outreach Colorado" and the "Colorado Governor's Office of Energy Management and Conservation (OEMC)". The sponsoring partners include the Alaska Energy Authority, Alaska Housing Finance Corporation, Colorado Governor's Office of Energy Management and Conservation, Current Energy Store, Guam Energy Office, Georgia Environmental Facilities Authority, Idaho Energy Division, Illinois Electric Council, Kansas Corporation Commission Energy Office, Louisiana Department of Natural Resources, Maryland Energy Administration, Minnesota Department of Commerce, State Energy Office, Missouri Energy Center, National Fuel Funds Network, Nevada State Office of Energy, Office of the Governor, New Jersey Natural Gas, New Mexico Energy, Minerals and Natural Resources Department, North Dakota Department of Commerce, Ohio Department of Development, Office of Energy Efficiency, Oklahoma Department of Commerce, State Energy Office, Texas State Energy Conservation Office, Utah State Energy Program, Virginia Department of Mines, Minerals and Energy, and Wyoming Business Council.

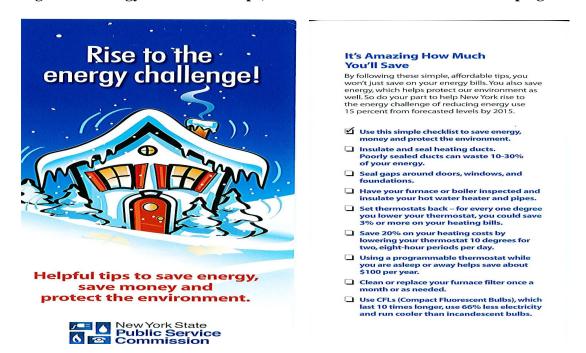
The "Energy Hog" campaign differentiates their messages and their communication technique by target user group. Different information programmes are offered to adult consumers and to youth groups. Whereas the youth information programme uses computer games to disseminate environmental education messages to young people, the adult consumer programmes emphasize the economic aspects of reduced monthly energy bills for electricity of fuel. The "Energy Hog' website offers a variety of programmes to calculate the (future) benefits of home insulation improvements or other energy efficiency investments. The "Energy Hog" webpage shows that households can be successful in reducing their energy bills by between 10 and 50 per cent. The webpage also provides comprehensive information on the energy efficiency ratings of appliances and the ENERGY STAR® product labeling programme. In the United States various income tax credits are available as incentives for home improvement investments, the installation of energy saving windows, insulation, doors, roofs and heating and cooling systems, and the "Energy Hog" webpage provides detailed information these tax credits, rebates, documentation requirements and application procedures.

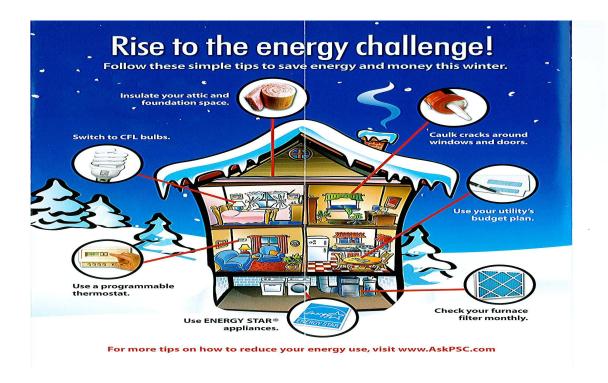
Under the current energy efficiency promotion legislation in the United States households can expect approximately the following financial incentives / rewards for energy efficiency retrofits: a) energy efficient exterior windows are reward with up to 10 per cent of the total costs, b) insulation, exterior doors, or pigmented metal roofs may also be rewarded by 10 per cent of the costs, c) investments in the installation of energy efficient central air conditioners, heat pumps or water heaters may receive a rebate of up to US\$ 300 towards the full purchase price, including installation costs, and d) energy efficient furnaces of boiler can reward credits up to US\$ 150 towards the full purchase price¹⁸.

Campaigns to promote energy conservation and energy efficiency are also conducted at local, city or state level. The 2002 "Keep Cool" programme gives New York residents the opportunity to replace old, inefficient room air conditioners with a new Energy Star® model and receive a US\$ 75 refund / tax credit¹⁹. The New York State energy conservation promotion programme also issues public information brochures with energy saving tips such as those presented in Figure 6.

Alliance to Save Energy provides a guideline on tax credits - see http://www.ase.org/content 19 160,000 old air conditioners were retired in under this State Program which is a statewide partnership involving the New York State Energy Research and Development Authority (NYPA)

Figure 6 : Energy conservation tips, New York State Public Benefit Campaign





The contribution of private carbon off-set providers and carbon trading initiatives 20

The objective of the paper is to provide an overview of the various forms of energy conservation and energy efficiency campaign initiatives. In this context, it should be recognized that the private sector also makes important contributions to environmental protection and greenhouse gas emission reduction initiatives.

Energy conservation and energy efficiency campaigns are also supported by non-profit organizations that have been established to combat climate change through carbon off-sets and carbon trading. "TerraPass" is one such example of a not-for-profit organization. Consumers are offered the opportunity to calculate their own "carbon footprints" and encouraged to make their economic activities carbon-/climate neutral through the purchase of independently verified²¹ carbon off-sets. When an individual buys a carbon off-set the funds are used to supports clean energy and / or other projects that reduce greenhouse gas emissions.

"TerraPass" was founded in 2004 by academics based at the University of Pennsylvania. "TerraPass" creates and trades in independently verified carbon off-sets offered to any interested (energy) consumer. At the start "TerraPass" registered some 2,400 members (customers) and supported carbon off-set project amounting to 36 million pounds of CO₂ emission reductions. "TerraPass" has grown very rapidly. In 2007 "TerraPass" products were purchased by some 85,000 members (customers). The corresponding investment amounted to more than 600 million pounds of CO₂ emission reductions. A variety of car rental companies have associated themselves with "TerraPass" or other carbon off-set providers.

The market for carbon off-sets and related services is expanding and diversifying very rapidly. A variety of publicly accessible webpages provide interested consumers with information on the various offers available.

²⁰ "TerraPass" has been established since October 2004. The website is www.terrapass.com

²¹ Carbon off-set verification can be based on a variety of protocols including the Voluntary Carbon Standard 2007, Green-e Climate, Chicago Climate Exchange Offset Protocols, California Climate Action Registry, EPA Climate Leaders, ISO 14064-2, and Global Standard

IV. Conclusions and recommendations

Public benefit and awareness creation campaigns that advocate energy conservation and energy efficiency investments educate and encourage energy consumers to consider all economic, social and environmental aspects of their energy use and implement energy saving and/or energy efficiency projects where and when possible. Realizing energy savings and energy efficiency investments can make significant contributions to sustainable development.

Rising energy prices, growing energy market volatility, growing concern over the security of future energy supply, and – last but not least – growing concerns over climate change and its negative impacts will likely make campaigning for energy saving and energy efficiency investments more important in the future. This overview has provided information and summary campaign profiles that show the various methods and approaches that can be taken to alert and inform consumers with regards to the economic, social and environmental issues involved.

Public benefit campaigns that promote energy conservation and energy efficiency form an important component in the planning and implementation of sustainable energy development policies and programmes. By raising consumer awareness and consumer preference for energy efficient products they can make significant contributions to advance market transformation towards a sustainable energy future.

Consumer rights to product information are increasingly recognized in more and more countries, and public information and public benefit campaigning can make significant contributions to the empowerment of consumers in present and future generations to make better and more sustainable consumer choices.

Public information and public benefit campaigning for energy conservation and energy efficiency investments needs to be supported by the necessary public budget allocations. In this context it is important that energy and energy efficiency laws recognize the importance of public benefit campaigning.

Thus far only very limited market research exists that analyzes consumer reactions to the various energy saving and energy efficiency campaign efforts. Such recommended additional studies will

be important, in particular for organizations and countries that have as yet to start their own campaign initiatives.

Considerable scope exists for greater international information exchange and cooperation in the field public benefit campaigning for energy saving and energy efficiency. Consideration should be given to explore opportunities for organizing a follow-up United Nations Forum with the thematic focus on this subject. Such an event could greatly facilitate the initiation or replication of public information and public benefits campaign in more countries.