

New subsidy programme: “GREEN LIGHT TO SAVING”

Within the Kyoto Protocol, the Czech Republic's emission allowances for the 2008–2012 period are expected to be approximately 150 million tonnes of CO₂eq., of which about 100 million tonnes can be traded within the international emission trading mechanism. The revenue from their sale is estimated to amount to approximately CZK 25 billion. What are the plans as regards spending this money?

The amendment to Act No. 695/2004 Coll., on terms of trading in greenhouse gas emission allowances, dated 18 July 2008, stipulates that the revenues from sales of emission credits belong to the State Environment Fund and can only be used to support activities and events resulting in reduction of greenhouse gas emissions.

Owing to the fact that the finance from the EU Structural Funds, Operational Programme Environment, has already relatively well covered the support for non-entrepreneurial legal subjects as operators of public facility buildings and cannot be allocated for the housing sector, it has been decided that this subsidy source will be focused on housing (family and apartment houses built using non-prefab technology).

Hence, the State Environment Fund has opened a new subsidy programme in April 2009 directed at renewable sources and energy savings for family and apartment houses. The new programme supersedes the State Programme for Energy Savings and Use of Renewable Energy Sources, which ended at the end of March.

Within the new (and significantly extended) programme, subsidies will be allocated to high-quality insulation of non-prefab family and apartment houses, replacement of non-ecological heating with low-emission biomass-fired boilers and efficient heat

pumps, installation of these sources in low-energy houses, as well as new construction in the passive energy standard.

The support will pertain to the following areas:

Energy savings on heating in residential buildings:

- Comprehensive thermal insulation of envelopes of family and apartment houses resulting in the building's attaining the low-energy standard;
- High-quality thermal insulation of selected parts of envelopes of family and apartment houses (implementation of a set of measures from the selection offered);

Support for construction in the passive energy standard:

- support for new constructions of family and apartment houses in the passive standard.

Use of renewable energy sources for heating and hot water:

- replacement of non-ecological heating in family and apartment houses (solid and liquid fossil fuel boilers, electric heating) by efficient low-emission biomass-fired sources and heat pumps with the set minimum heating factor with the given thermal characteristics;

» cont. » page 2

inside:

- 2 *Energy performance of buildings – new buildings and large reconstructions must be at least class C!*
- 2 *TopTen – new categories of energy-efficient products*
- 3 *Prime Minister Topolánek: “The best energy is that which isn't produced in the first place.”*
- 3 *Energy savings in schools in Prague 13*
- 3 *Prague Marriot Hotel wins an award for the best European energy-efficient lighting project*
- 4 *Smart energy consumption metering – the first step towards saving*
- 4 *Seven out of 10 Europeans want the current energy label appearance maintained*
- 5 *7 myths about energy-efficient fluorescent lamps*
- 5 *New layout of www.svn.cz*
- 6 *The National Theatre becomes a partner of the GreenLight programme. EU Commissioner Andris Piebalgs hands over the programme's plaque*
- 6 *Energy revolution – energy for change*

The European Commission reduces standby consumption

The European Commission has adopted a regulation aimed at significantly reducing the standby electricity consumption of household and office appliances, and a regulation to reduce the electricity consumption of simple set-top boxes. These regulations should result in a decrease in standby electricity consumption of up to 75% by 2020. The regulations, adopted by the Commission in December 2008 and January 2009, will come into force in the first quarter of 2009. They are among the first implementing measures of the Eco-design Directive (2005/32/EC), which establishes a framework for reduction of the energy consumption and other negative environmental impacts occurring throughout the product life cycle.

The first standby regulation (No. 1275/2008) applies to a large selection of household electrical appliances and electronic equipment: from dishwashers, washing machines and hot plates, through entertainment technologies (TV sets, DVD players and hi-fi recorders), to information technology equipment, and even toys and musical instruments. The regulation stipulates that from 2010 electricity consumption

of these appliances and equipment must not exceed 1W in the off mode and 1 or 2W in the standby mode (depending on whether the appliance executes any additional function). From 2013, these limits will be reduced to 0.5W in the off mode and 0.5W or 1W in the standby mode. An important aspect of the regulation is that from 2013 appliances, if applicable, must be equipped with the function of

electric energy consumption reduction, which within the shortest possible time will automatically switch the gadget to standby or off mode. This will prevent an appliance from being on for an unnecessarily long time when the user forgets to switch it off.

The second regulation (No. 107/2009) responds to the increasing number of set-top boxes in households

» cont. » page 6



Energy performance of buildings – new buildings and large reconstructions must be at least class C!

Within the implementation of the European Energy Performance of Buildings Directive (EPBD), as of 1st January 2009 almost all applicants for building permits or announcement of construction are obliged to submit a certificate documenting the building's energy intensity. Did you know that the majority of new buildings and large reconstructions must be at least energy class C? Who oversees that this obligation is met?

The certificate of a building's energy performance is a compulsory part of the construction's documentation which must be submitted to the building authority during the building permit procedure. This is stipulated in the current Building Act, No. 183/2006 Coll., and its implementing regulation, No. 499/2006 Coll., on building documentation.

The energy performance certificate is defined in Act. 406/2006 Coll., on energy management, and its implementing regulation, No. 148/2007 Coll., on energy performance of buildings. This legislation fully implements EU Directive 2002/91/EC, on energy performance of buildings (EPBD). The main point of introducing the certificates is to make owners, lessors and users of buildings better informed about energy intensity.

One of the obligations arising from the aforementioned legislation is that the majority of new buildings (including, for example, family houses and also significantly reconstructed buildings with the flooring of more than 1,000m²) must be in energy class C.

However, the current practice reveals that owing to the insufficient knowledge and laxity of the proprietors participating in the building permit procedure, as well as some officials at building authorities, the use of the certificates and their evaluation is wrongly interpreted. Building authorities usually correctly require the submission of energy performance certificates, which are compulsory for new buildings and buildings that have undergone large refurbishment with the flooring exceeding 1,000m².

The problem sometimes arises at the moment when fulfilment of the compulsory meeting of the low energy intensity requirement of the given building should be evaluated. With regard to the fact that building authority officers are mainly oriented to building law and not energy-related legislation, they do not always have sufficient knowledge of the requirements of other, albeit closely connected, legislation.

Satisfying the required level of energy intensity, expressed by the class of energy performance of a

building, is defined in the Act on energy management and the Regulation on energy performance of buildings. This obligation is sometimes not fulfilled, and a construction is still permitted.

Requirements for lower energy intensity are mostly not met in the case of new buildings of single-storey family houses, where standard ("hitherto considered standard by builders") thermal-technical properties of the building often do not reach the minimum required class "C – Satisfactory" or better.

The table below shows the energy intensity individual types of buildings can have in the case of new buildings or largely refurbished buildings with the floor area exceeding 1,000m² so as to satisfy the legislative requirements (bold).

More information: Answers of the Ministry of Industry and Trade to questions pertaining to this topic are available on its website:

<http://www.mpo.cz/dokument56108.html>

Petr Zahradník, petr.zahradnik@svn.cz

Energy performance of buildings [max. kWh/m²/year] pursuant to Regulation 148/2007 Coll.

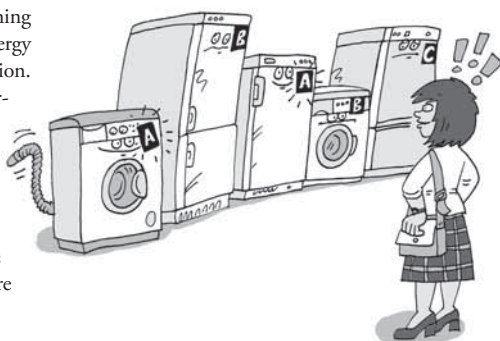
Type of building	A	B	C	D	E	F	G
Family houses	< 51	97	142	191	240	286	> 286
Apartment houses	< 43	82	120	162	205	245	> 245
Hotels and restaurants	< 102	200	294	389	488	590	> 590
Administrative buildings	< 62	123	179	236	293	345	> 345
Hospitals	< 109	210	310	415	520	625	> 625
Schools	< 47	89	130	174	220	265	> 265
Sports facilities	< 53	102	145	194	245	297	> 297
Shops	< 67	121	183	241	300	362	> 362

TOPTEN – NEW CATEGORIES OF ENERGY-EFFICIENT PRODUCTS

topten.info

Since 2006 the website www.uspornespotrebice.cz has been listing the most energy-efficient electrical appliances on the Czech market. At the same time, it provides a summary of the criteria according to which specific products have been selected for the database. When it comes to refrigerators, freezers, washing machines, dishwashers and lighting units, energy labels serve as the main source of basic information. As regards other appliances, it concerns the information acquired from their manufacturers. The website is a partner of the Euro TopTen international project, which publishes similar summaries in another 13 EU countries. Under preparation is "entry" to the largest lighting markets – the USA and China. The products database is regularly updated. Owing to the availability of more

energy-efficient products, the criteria for inclusion in the database have gradually become stricter and the list of products has been extended by new product categories. The most recently listed products are halogen bulbs replacing classical bulbs, and LED light sources. The website's high visit rate and responses on the part of users serve as proof that it is a sought-after tool for energy consumption reduction in households. *-jk-*
www.uspornespotrebice.cz



« NEW SUBSIDY..., cont.

- installation of biomass-fired sources and heat pumps in new low-energy buildings of family and apartment houses;
- installation of solar-thermal collectors on residential buildings.

The conditions of the programme aimed at the use of renewable sources will link up to the current programme; only in the case of biomass-fired boilers will support be given to sources with even better emission characteristics than to date. Accordingly, applicants installing a source only fulfilling emission class 3 had to ask for a subsidy by the end of March within the previous programme of support. It is essential that it will concern a requirement subsidy programme.

When the programme was being drawn up, SEVEN was actively participating in setting optimal parameters of the subsidised areas, ascertaining the absorption capacity of the subsidised markets, determining the level of the subsidies granted, etc.

Tomáš Chadim, tomas.chadim@svn.cz

More information: Ministry of the Environment and State Environment Fund, www.env.cz, www.sfzp.cz

PRIME MINISTER TOPOLÁNEK: “THE BEST ENERGY IS THAT WHICH ISN’T PRODUCED IN THE FIRST PLACE.”

Below is an extract from the speech by the Czech Prime Minister, Mirek Topolánek, delivered to open the 2008 edition of the international EEBW: Energy Efficiency Business Week conference (November 12, 2008), organised by SEVEN and taking place every other year.

“Today, the energy sector is at the centre of attention. Efficient use of energy is as great a necessity for civilisation as providing its sufficiency. One without the other is meaningless. A high standard of living must not threaten the environment, and energy saving must not result in reduction of citizens’ quality of life. Power engineering also connects our presidential trio in the EU. The French Presidency is preparing a climate/energy package for approval. One of our main priorities is energy security. And the Swedish Presidency wants to focus on energy efficiency. Naturally, all these endeavours link up to each other, and we have been consulting each other about them. The Czech Republic, despite the enormous progress made over the past 18 years, still has one of the highest per capita rates of greenhouse gas production in the world. With 14.2 tonnes of CO₂ per capita a year, we exceed the EU average (10.5 tonnes). And



also that of China, which is the largest global polluter as regards the total volume but, for the time being, only emits 5.7 tonnes per capita a year. At the same time, it is clear that even when all the necessary savings are applied energy consumption in the Czech Republic will grow over the next few years – according to conservative estimates, by at least one per cent annually. Accordingly, we must not only reduce emissions, which we are obliged to do in line with EU plans, but also increase energy production,

which is an absolute imperative.

Therefore, in my brief speech I would like to defend two theses. The first is: the best energy is that which isn’t produced in the first place. And the second: it’s better not to produce CO₂ than to get rid of it in a complicated manner.”

Full wording of the speech at the EEBW 2008 conference (12. 11. 2008) at: www.svn.cz – the section SEVEN in the media (published on 17. 12. 2008).

PRAGUE MARRIOTT HOTEL WINS AN AWARD FOR THE BEST EUROPEAN ENERGY-EFFICIENT LIGHTING PROJECT

On 11 February 2009 the Prague Marriott Hotel received an award for the “Best European Energy Service Project in the Lighting Sector”. The prize has been awarded since 2005 by Berliner Energieagentur in five categories and was handed over by Mrs Fiona Hall, member of the European Parliament. The ceremony took place within the European Union’s Sustainable Energy Week in Brussels.

The hotel received the prestigious award for specific energy savings in lighting and their implementation in the form of energy services. Following consultations with SEVEN, the hotel’s management decided to have drawn up a detailed assessment of possible electric energy savings, both in the premises accessible to the public and the hotel’s background facilities. The project has resulted in, for example, replacement of classical bulbs with 30% more efficient halogen bulbs and 80% more efficient compact fluorescent lamps. Also widely applied have been highly efficient LED technologies, lighting entrances to individual rooms. These light sources save up to 90% of energy and their services life is ten times longer. The environmental benefit represents an annual saving of 472 tonnes of CO₂ emissions.

The Prague Marriott Hotel took these saving measures within the European GreenLight programme, a partner of which it has been since the autumn of 2008. On the basis of the Prague project’s successful implementation and the overall interest in energy

saving, the pan-European network of Marriott hotels has decided to join the GreenLight programme too.

Juraj Krivošík, juraj.krivosik@svn.cz
www.marriottprague.com



The award ceremony (from right to left): P. Geissler, director of the Berliner Energie Agentur, J. Krivošík, executive director of SEVEN, T. Heiroth, technical director of the Prague Marriott Hotel, F. Hall, member of the European Parliament.

ENERGY SAVINGS IN SCHOOLS IN PRAGUE 13

Within the endeavour for efficient use of energy, the municipality of Prague 13 has prepared a project of thermal insulation of buildings of eight nursery schools and seven primary schools costing 273 million crowns. Drawn up in co-operation with SEVEN were the energy audits and applications for subsidies from the Operational Programme Environment, which was announced by the State Environment Fund. All the applications were successful. Consequently, Prague 13 should receive a subsidy amounting to 69% of the costs, which represents approximately 189 million crowns. At the present time, the project documentation is being prepared. The actual insulation of the buildings will be carried out during the course of 2009.

The text originally appeared in the magazine Priority of the State Environment Fund, issue No. 3/2008 (www.opzp.cz)

The aforementioned subsidies are intended for energy-saving construction measures which have a longer pay-

back period. Saving measures with a shorter payback period will be taken in the form of providing energy services with a guarantee. At the present time, a selection procedure for an energy services company is taking place. The selected company will implement and pay for the final form of energy-saving measures entailing changes in heating systems. The investment laid out will be gradually paid off to the firm from the operating costs saved. As a result, the schools will acquire a comprehensive project of energy consumption reduction, whereby only costs for measures with a long payback period will be covered from public means. This combination of various financing methods for the applicant for support from the Operational Programme Environment will secure the necessary volume of energy consumption reduction, for which the State Environment Fund is contractually obliged.

Kontakt: Vladimír Sochor, vladimir.sochor@svn.cz
<http://www.praha13.cz/zdroj.aspx?typ=2&Id=7431&sh=1023544120>

Smart energy consumption metering – the first step towards saving

One of the main arguments for mass introduction of advanced metering technology, so-called smart metering, at small consumers' is the expected benefits for end customers, especially in the form of more efficient energy use. However, specification of these benefits is, compared to the costs necessary for building up the required measuring infrastructure, burdened by a significant degree of uncertainty. Hence, the numerous pilot and demonstration projects now taking place worldwide are focused on their assessment.

In the Czech Republic pilot tests verifying various technological alternatives of introducing smart metering of the AMM/AMI type, i.e. an infrastructure capable of remote management and reading for households and other small consumers, are taking place too at the present time. Unfortunately, these tests lack linkage to the end customers. In light of the current experience, now is the right time for supplementing this function for validating the effects. Within the activities of the international ESMA project, which SEVEN is participating in, last autumn a plan for linking up to the aforementioned pilot AMM/AMI projects was drawn up. In co-operation with the respective governmental bodies and one energy distributor, later on even more distributors and, possibly, energy suppliers, the intention is to prepare a comprehensive functional system of providing information

about energy consumption to end customers, primarily from the ranks of households, in order to increase their knowledge and interest in possible savings.

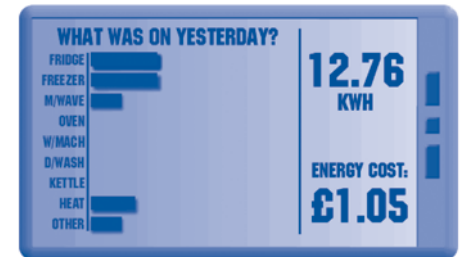
The proposed solution differs from the absolute majority of pilot projects implemented to date, which to a significant extent have been limited to verification of possible effects resulting from introducing advanced metering at end customers' (small consumers) without applying other suitable tools and forms of motivation, often even without households being interested in installation of a "smart electricity meter".

The intention is to use a set of technical, information and economic tools and incentives to effectively motivate end customers (small consumers) to make energy savings while applying tools of "smart" metering technology. Its basic principle is to motivate households so that they themselves actively seek and implement

measures aimed at reducing consumption of energy, primarily electric energy in the first phase.

The programme's final objective is to help during meeting national obligations in the area of energy intensity reduction and reduction of greenhouse gas emissions. The results attained could then also aid the market regulator in making decisions as to who should bear the costs (and to what extent) for possible mass introduction of smart metering in the future.

This spring, intensive negotiations about the programme's implementation will be conducted with representatives of state administration and energy utilities.



Display of the Coracle product showing electricity consumption the previous day, the corresponding costs and share of appliances in the costs.

One of collateral outputs is expected to be the development of a "smart electrometer" which will be capable not only of remote reading of consumption (and other today customary functionalities characteristic of AMM/AMI-type solutions) but also distinguishing partial areas of electricity consumption.

A similar solution is today being developed by, for example, Oracle in Great Britain (see the picture).

Tomáš Voříšek, tomas.vorisek@svn.cz



Prague Zoo wants to use biogas from its own waste

PRAGUE ZOO has decided to organise a tender for construction of a centre for processing biological waste from its animals and plants. The centre will also include a biogas production plant and a composting unit. Its objective will be to demonstrate to the zoo's visitors the life-cycle of organic materials, which can also be used for energy generation and as a fuel.

The biogas produced could be utilised for electricity and heat generation, and possibly even used as an energy source – fuel for the zoo's motor vehicles.

The tender for the centre's implementer and operator is expected to take place in the spring. By the end of 2009 the winner should be known and work on the construction of the bio-waste centre should be launched.

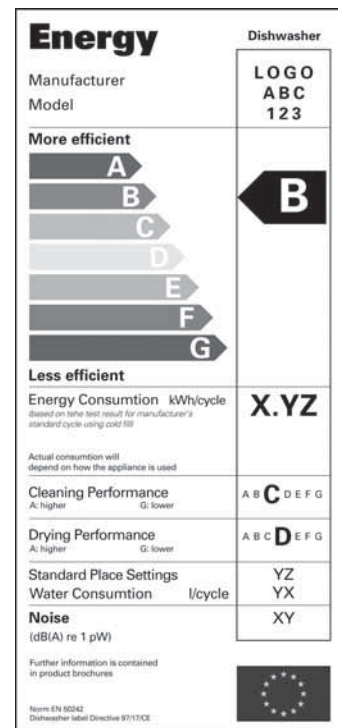
Tomáš Voříšek, tomas.vorisek@svn.cz
www.zoopraha.cz

SEVEN OUT OF 10 EUROPEANS WANT THE CURRENT ENERGY LABEL APPEARANCE MAINTAINED

The European Commission is at the present time deciding about a new appearance of the energy label for domestic electrical appliances. An international poll, carried out in January 2009 on a sample of 7,000 people in Great Britain, Poland, Denmark, Germany, Holland, France and Italy, revealed that seven out of 10 Europeans find the current form of the energy label (a colour scheme with arrows and the letters A-G) much easier to comprehend than the alternative designs presented by some EU countries.

The poll revealed that more than 9 out of ten Europeans know the current system of energy labelling, which was set up in 1994. Whereas in 1999 only 4 per cent of refrigerators sold were in class A, in 2008 their number was 72%. When it comes to washing machines, the figures were 12% in 1999 and almost 100% in 2008. For this reason, new legislation modifying the standards for energy classification of electrical appliances was prepared, yet it also raised interest in possible more extensive content and better graphic layout of the energy label.

The results of the poll were published by the UK's Energy Saving Trust. -jk-



Note: The case study of the CEECAP project has become "Case Study of the Month" on the website of Managenergy.org. The CEECAP was focused on promotion and implementation of the legislation on energy labelling of electrical appliances in Central and Eastern European countries. For more information, visit: www.managenergy.org

7 myths about energy-efficient fluorescent lamps

Are you still hesitating about purchasing energy-efficient lighting units? In co-operation with SEVEN, the Czech daily Lidové noviny published in December 2008 seven answers to the most frequent arguments preventing people from using energy-efficient fluorescent lamps.

1. Energy-efficient fluorescent lamps don't have a high share in energy saving

Although lighting has a relatively low share in the total energy consumption in households and buildings, its advantage is that installation of energy-efficient light sources is usually very fast and simple, and the return on the investment in energy savings is quicker than in the case of the majority of other energy-saving measures.

2. Their purchase price is high.

Their price is higher than the price of traditional bulbs simply because it concerns a product more exacting in technological and production terms. However, the price of energy-efficient fluorescent lamps has significantly decreased over the past few years. Owing to this price decline, growing energy prices and the increased quality of energy-efficient fluorescent lamps, the return on the investment is within several months (with their service life lasting several years).

3. They don't last as long as the manufacturer states on the packaging.

Available on the market are fluorescent lamps which last three to fifteen times longer than traditional incandescent lamps. This data is stated on the packaging. In general, we recommend choosing products with a longer service life since their other parameters are also better. One of the aspects that can affect a product's service life is the frequency of its switching on and off. Therefore, products with a longer service life are in general more resistant to possible frequent switching on and off. In all cases, a guarantee applies to energy-saving fluorescent lamps, so it is possible to keep the receipt and make a claim.

4. Light from these fluorescent lamps is unnatural. It hurts the eyes.

There are no known negative health effects of compact fluorescent lamps. Of course, in the case that you have the feeling that they are not good for you, there are alternatives: halogen bulbs which have the same colour of light as traditional incandescent lamps, as well as, and to a greater extent, LEDs. In any case, it is good to check the colour rendition of light – if an energy-saving fluorescent lamp is to replace a traditional fluorescent lamp, it bears the designation 827; if it is to imitate the whiter colour of daylight, look for the designation 840 or 860.

5. It takes a long time before a fluorescent lamp lights up to the full.

Admittedly, the start-up time of energy-efficient fluorescent lamps is a little longer. However, in the case of high-quality fluorescent lamps it does not exceed one minute. Thus, it is often just a psychological problem, when we see that a fluorescent lamp does not reach its full output immediately after being switched on.



6. Frequent switching on and off is bad for fluorescent lamps.

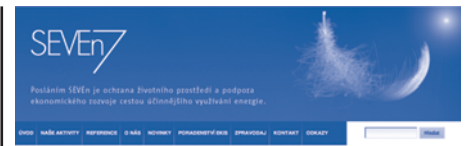
It does not matter with high-quality fluorescent lamps since they have a large number of on/off cycles. In the case of first-rate products, it is up to 600 thousand (only 10 thousand when it comes to lower-quality lamps). Hence, frequent switching does not reduce their service life. The data about the number of on/off cycles is not stated on the packaging.

7. They damage the environment.

Energy-efficient fluorescent lamps can damage the environment only if you throw the used product into a mixed-waste bin, or even dispose of it in open nature. One lighting unit can contain from four to twenty milligrams of mercury and other substances evidently damaging health and the environment. For this reason, used fluorescent lamps must be taken to a place intended for hazardous waste collection or to a shop (any if it concerns a reasonable amount, otherwise to the shop where we usually buy new light sources). It should also be mentioned that manufacturers have been reducing the quantity of mercury, so it is much lower than the amount that would get into the atmosphere as a result of generation of electric energy for operation of a classical incandescent lamp.

LIDOVÉ NOVINY

The full wording of the article is available on the website of Lidové noviny, in the Housing section: http://bydleni.lidovky.cz/7-mytu-o-uspornych-zarivkach-dgz-/home-bydleni.asp?c=A081202_104233_home-bydleni_glu.



NEW LAYOUT OF WWW.SVN.CZ

In 2009 the website www.svn.cz acquired a new graphic layout. On this occasion, we also updated the content of references and individual documents. On our website we regularly publish press articles and news that SEVEN has contributed to. We also provide links to independent project websites dealing with specific issues.

- <http://www.svn.cz/en/public-projects>
- www.uspornespotrevice.cz Energy-efficient household electrical appliances on the Czech market. Database of products, advice concerning their purchase.
- www.uspornajizda.cz Eco-driving We are seeking class A drivers!
- www.promoscene.eu PromoSCene Promotion of using the Structural Funds and the Cohesion Fund for investment in the energy sector in new EU member states.
- www.studio-ned.cz Studio NED Comprehensive services in designing low-energy new and refurbished buildings.
- www.reshape-social-housing.eu RESHAPE Paving the way for a better energy performance of buildings through implementing the EPBD.
- www.energypluspumps.eu Energy+ pumps Initiative for promotion of energy-efficient circulation pumps.
- www.selina-project.eu SELINA Monitoring of stand-by energy consumption of electrical appliances available on the EU market.
- www.clearsupport.cz Clearinghouse Support for energy savings in buildings in Europe.
- www.sec-tools.cz SEC-Tools Possibilities of energy planning and application of tools for sustainable energy consumption at the municipal level.
- www.mcpeurope.net/4em Motor Challenge A comprehensive motivational programme promoting the implementation of new, more efficient engines in various industrial applications.

-jk-



« THE EUROPEAN COMMISSION..., cont.

that can be expected due to the ongoing digitisation of television broadcasting throughout the European Union. This regulation stipulates the maximum electricity consumption of simple set-top boxes (defined as devices whose only function is to receive television programmes in one of the digital formats). As of 2010, simple set-top boxes will not be allowed to have energy consumption in the on mode exceeding 5 W and in the standby mode more than 1 W. From 2012, the second limit will be reduced to 0.5 W. The regulation allows for admissible deviations in the on mode for add-in functions: +6W for hard disk, and +1W for the second tuner or decoding signals in high resolution. An important part of the regulation is, similarly to the standby regulation, the requirement for automatic consumption control, according to which a simple set-top box must automatically switch from the active to the standby mode after less than

three hours in active mode following the last user interaction.

Fulfilment of both regulations must be ensured by manufacturers. Consumers need not worry about reduction or limitation of appliances' functions; on the contrary, they can rest assured that the new gadget they choose will already have low electricity consumption in the standby mode. In addition, when it comes to simple set-top boxes, manufacturers will have to ensure that consumers are provided with data about energy consumption in both the standby and active modes. Electricity consumption in the standby mode has long been considered largely unnecessary, representing a waste of energy and of consumers' money. The combination of the new standards will hopefully finally result in significant reduction of this consumption.

Michaela Valentová, michaela.valentova@svn.cz

THE NATIONAL THEATRE BECOMES A PARTNER OF THE GREENLIGHT PROGRAMME. EU COMMISSIONER ANDRIS PIEBALGS HANDS OVER THE PROGRAMME'S PLAQUE

During his visit to Prague to mark the launch of the Czech Presidency of the Council of the European Union on 7 January, the EU Energy Commissioner, Andris Piebalgs, handed over a GreenLight programme plaque to National Theatre representatives.



The Commissioner for Energy, A. Piebalgs (left) giving the GreenLight plaque to O. Černý, the director of the National Theatre in Prague.

Národní divadlo

The international GreenLight programme was launched in 2000 by the European Commission with the aim to provide information and marketing support for organisations using energy-efficient lighting systems in their premises and create an appropriate working environment for the building's users, thereby contributing to environmental protection and reducing operating costs. Prior to his journey to Prague, EU Commissioner Piebalgs asked for an example of a project whose implementation was markedly beneficial in terms of energy savings and, at the same time, potentially feasible in other buildings too. On the basis of this requirement, SEVEN drew his attention to the energy-saving lighting project in the buildings of the National Theatre in Prague.

By joining the GreenLight programme, the National Theatre continues in its long-term activities pertaining to energy consumption reduction in its buildings. The energy-efficient lighting installation project, with the average investment return within two years, will result in annual savings of 460 MWh of electric power and 542 tonnes of CO₂ emissions, which represents approximately one million Czech crowns a year. The

main measures taken include replacement of the original light sources (incandescent bulbs) with energy-efficient compact fluorescent lamps and LEDs, replacement of linear fluorescent lamps by more modern and more efficient linear fluorescent lamps, and installation of regulation and control equipment.

The energy-efficient lighting project links up to the project entailing overall modernisation of energy management in the National Theatre buildings, which in the form of energy services with a guarantee (an EPC project) was implemented by the company ENESA a.s. This project has reduced the total energy consumption by 26.7% as against the initial level. The project's next phase is installation of photovoltaic cells on the roof of the operations building of the National Theatre.

The GreenLight programme in the Czech Republic is organised by SEVEN, which has also drawn up a study assessing the possibilities of energy savings when it comes to lighting of the buildings of the National Theatre in Prague.

More info: Tomáš Voříšek, tomas.vorisek@svn.cz

ENERGY REVOLUTION – ENERGY FOR CHANGE

Quotations from an interview with Nobuo Tanaka, Director of the International Energy Agency



What is your opinion of the revolution in energy generation and transmission?

NT: What I mean by 'energy revolution' is that, because of climate change challenges and the current state of supply and demand, we have to significantly alter our approach to energy efficiency. High levels of energy efficiency are necessary, but not enough. We have to reform the power sector through carbon capture power storage, nuclear or renewable energy, but this is also not enough. We need to revolutionise the transport sector by switching from gasoline-combustion engines to things that run on de-carbonised power, whether electricity, biofuels, advanced hybrid or hydrogen fuel cells. All of this is very costly, by the way, so energy will be very expensive. So the ways of using energy will change, and even distribution channels could be different. Put simply, business or government regulation should focus more on these facts, and profit and investment targets should be changed accordingly, depending on which new elements emerge in the future.

Published in the quarterly GreenHorizon (3/2008), issued by the Regional Environmental Centre for Central and Eastern Europe:

<http://greenhorizon.rec.org/interviews/energy-for-change-power-for-the-future.html>



International Energy Agency:
www.iea.org