

INVITATION TO THE EEBW 2004 CONFERENCE

European directives to be applied to national legislation

Now that the Czech Republic and nine other states have joined European Union, the European legislation must be correlated with their national legislative regulations. Environment protection and energy economy changes in the new Member States national legislation according to European Union directives related to the same sphere will be discussed at the 9-year EEBW anniversary that will be held in November 2004 in Prague.

Electricity and gas market opening

This new directive accelerates, deepens and harmonizes the electricity and natural gas markets opening them to fair competition. All European Union Member States must open their internal markets and ensure that all customers, except households have a free choice of distributor from July 1, 2004, and from July 1, 2007 all households as well, unless no dedicated exception was agreed on.

Today's Czech legislation situation is as follows: the draft of the amended Czech Republic Energy Act (Parliament document No. 641) has been moved to the Czech Republic Parliament (Chamber of Deputies) for the second reading. The expected Act of Parliament will come into force on January 1, 2005.

High-efficient cogeneration promotion

The Directive is concerned only about high-efficient cogeneration and introduces a guarantee of electricity origin from the appropriate sources. EU Member States must evaluate the cost effectiveness capacity for implementing high-efficient cogeneration and provide for the fulfillment of this capacity. However the Directive itself does

not stipulate establishing national supporting facilitation programs.

Emissions trading scheme

Greenhouse gases emissions allowances trading should be more profitable for companies than traditional fixed quantitative emissions limits. The main principle of greenhouse gases emissions allowances trading is that in the national allocation plan each emission source, which comes within the trading system, would obtain maximum emission capacity permission - at first CO₂ certificates. The source company would have the choice of either reducing their emissions, or purchasing the appropriate number of missing emission certificates from other entities within the European Union. If, however, the company emits less than it was allocated, the company could sell its surplus certificates on the market.

Today's Czech legislation situation is as follows: the draft law of emissions allowances trading will be moved to the Czech Republic Parliament by the Czech Government this autumn. The expected Act of Parliament will come into force on January 1, 2005, if Parliament can pass it by that time.

Energy end-use efficiency and energy services

The proposal for a Directive of the European Parliament and of the Council on energy end-use efficiency and energy services COM (2003) 739 is one of the most significant and at the same time may become the most controversial European legislation documents.

The objective of this proposal is to increase end-use energy efficiency measures. The obliga-

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Energy audits... moving the goalposts?

During the course of this summer, the regulation defining energy audit requirements was legislatively amended. The regulation specifies and extends the legal prerequisites of energy audits and in some respects (in places where formerly scope was left for self-interpretation and selection of methodology) specifies and unifies the manner of auditing. However, this amendment has not resolved all the issues relating to energy audits.

An energy audit is a product, stipulated by Act 406/2000 Coll. on energy economy, analysing energy management and buildings in the property of the subjects concerned and proposing economically efficient measures for their improvement. The dates for meeting the legal obligations following from the September 2003 modifications have remained the same - by 31. 12. 2004 for all consumers (i.e. from energy consumption levels of 1,500 GJ/year and 35 thousand GJ/year for public and private institutions, respectively), except by 31. 12. 2005 only in the case of consumers with a ten-fold and higher consumption (above 350 thousand GJ/year). Pursuant to the amended regulation, the role of the State Energy Inspection has also remained unchanged.

The new regulation takes effect immediately, without transition periods. Hence, energy audits that have been contracted for and commenced

under the conditions of the old regulation must be completed according to the new legislation.

Thus, it can be stated that those who put off assigning energy auditing until the last minute bet on the wrong card. The legal obligation to "audit" property has not changed. Audit content, conversely, has been extended to include:

- the obligation of evaluation of lighting;
- obligatory proposal of renewable energy sources;
- evaluation of energy-saving measures feasible using the EPC method as an energy service;
- the new category of neglected maintenance;
- and a number of other measures, for example reformulating clauses on economic evaluation.

Pertaining to lighting systems is Section 4, paragraph 15, prescribing the ascertainment of the illumination level by means of its measurement, its evaluation in sanitary terms, an assessment of its energy intensity and a proposal of savings measures. However, only Public Health Service bodies are authorised to carry out mandatory evaluations in sanitary terms. Hence, the question arises of what exactly an auditor's statement is to serve for. If the illumination level is worse than that required, no savings will originate. If it is higher, it is hard to imagine an auditor proposing conversion of a new lighting system to lower parameters.

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Trade in emission permits and the National Allocation Plan of the Czech Republic

At the end of August, the Czech Government was presented with the National Allocation Plan of the Czech Republic for the newly introduced system of trading in emission permits within the European Union beginning in 2005. The plan stipulates the total amount of emission permits to be allocated to significant CO₂ emission producers, as well as the manner of their distribution among individual subjects.

The system of emission permit trading within the European Union will be launched in January 2005 in all EU member states. Therefore, in late August, the National Allocation Plan was presented to the Government of the Czech Republic for approval, setting the total quantity of permitted CO₂ emissions at the level of 99.5 million tonnes. The plan also contains a list of the industrial plants included in the emission

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Energy audits... moving the goalposts?

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Relating to savings measures reimbursable from cost savings (the EPC method) is Section 6, paragraph 5, ordering non-profit organisations to define a set of measures due over a time shorter than half the depreciated life of tangible assets.

Economic evaluation, as set out in Section 7, was amended in the basic text of the regulation by paragraph 3, stipulating that costs for remedying neglected maintenance are not counted in the economic evaluation. From the viewpoint of a user making monetary outlays "from a single pocket", it means division of expenses into two categories that will reduce the transparency of economic evaluation. Greater problems have been brought about by Annex 7, which besides modifying the definitions of individual evaluation methods also introduces several entries (for example, income tax), shifting the original purpose of audit that evaluated a "before bank project" into a position leading to evaluating the manner of financing, i.e. an "after bank project".

The requirement in Section 9 paragraph 1e prescribes assessment of the potential use of renewable energy sources, including an economic evaluation. Is it possible to derive from this a duty on the part of the auditor to supplement audits with measures concerning renewable sources, even when it is evidently pointless?

Imposition of these and other obligations will increase both the laboriousness and scope of audits, which may be reflected in their price too. Last year, energy audit prices were compressed as a result of competition; however, surplus demand in free capacities has manifested in a gradual growth of audit prices, and another increase can be expected at the end of this year. Although government subsidies for drawing up energy audits still exist, they have been markedly reduced. In comparison with

the beginning three years ago, when the level of support totalled 100%, at present it is roughly a tenth of this, with a 15% allowance being quite exceptional.

In addition, the amendment to the regulation has failed to tackle many issues. This includes the following problems:

- the introduction of a repeated audit obligation;
- obligation and expediency of audits for selected areas (for example, standard prefabricated houses);
- insufficient interconnection of compulsory audits with programmes for subsequent financing of proposed measures;
- the formal nature of some clients' and auditors' approaches to the drawing up of audits;
- the discrepancy between audits according to the law and the requirements of the State Environmental Fund for the content and execution of audits.

The issuance of the amendment to the regulation on energy audits only in the second half-year prior to the termination of the legal obligation raises mixed feelings. It is akin to changing the rules during a football match, or maybe 10 minutes before the end suddenly moving the goalposts. The amendment has been discussed in professional circles for almost two years now. It would certainly have great significance if it had rectified the inaccuracies of the original regulation immediately following the gathering of experience with its usage two years ago. And there was certainly plenty of such knowledge on the part of skilled auditors!

Let us hope that similar problems are avoided in the prepared amendment to the Act on energy economy. The requirement for implementing EU directives dates its coming into force no later than on 1. 1. 2006.

Ladislav Tintěra

European directives to be applied to national legislation

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tory commitment to adopt general national targets of annual cumulative savings of 1% to promote energy end-use efficiency and 1.5% in the public sector, which is the most essential of these arrangements. Energy services, Energy Performance Contracting, energy auditing, which are almost obligatory for energy producing companies, are supposed to be applied to achieve these goals. The proposal also stipulates providing network-connected end-users with competitively priced individual metering.

Energy performance of buildings

The directive suggests that Member States should establish a methodology for calculating the energy performance of buildings over 1,000 m², introducing a system of building certification (wall-plating), in order to confirm that newly built and refurbished buildings meet the minimum requirements of the building performance standard, and to confirm the feasibility of using renewable energy sources for new buildings, combined electricity and heat production, district heating and cooling, and heat pumps. The directive therefore imposes the obligation of regular inspection of boilers with an output of more than 20 kW and air conditioning systems with an output of more than 12 kW.

At the present time a dedicated group of professionals at the Ministry of Industry and Trade is preparing an amendment to the Energy Economy Law No. 406/2000 Coll. to update it according to the valid energy performance of buildings Directive No. 2002/91/EC of the European Parliament and Council of December 16, 2002.

Electricity from renewable energy sources

The directive suggests that EU Member States should increase energy consumption from renewable electrical energy sources with regard to the targets set up at the national level. Nevertheless, the directive does not demand national support programs to be established. The directive is related to electricity generated by the above-mentioned energy sources. According to this directive Member States must establish schemes to guarantee the origin of electricity produced by renewable electrical energy sources. They also must make public the indicative targets set for this market, as well as ways to achieve these targets and the effort applied to remove administrative and technical barriers, which could hinder the development of electricity generated from renewable electrical energy sources on the market.

The Czech Government draft law related to electricity and heat renewable sources (Parliament document No. 529) is being discussed together with the amended Czech Republic Energy Act in the Chamber of Deputies, and will come into force on January 1, 2005, if it is approved.

The issues of the European legislation in the field of energy and environment, as well as its impacts on the legislative of the new EU member states will be discussed during the international conference EEBW: Energy Efficiency Business Week 2004. For more information please visit www.eebw.cz or look at the 3rd page of this issue of News at SEVEN. We will gladly send you more detailed information about the program of the conference upon request.

Trade in emission permits and the National Allocation Plan of the Czech Republic

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permit trading system, and defines the method of determining the number of permits that will be allocated to individual sources.

From 2005 on, operators of these sources will be obliged to hand over one permit for each tonne of CO₂ emissions produced, otherwise they will pay a fine. This means that operators of plants emitting a quantity of emissions larger than the number permits allocated to them must either reduce emissions at their sources or buy the lacking permits. Trade in emission permits can take place between firms throughout the European Union, either directly or through brokers. Pursuant to EU Directive (2003/87/EC), the fine for not handing over one permit in the first trading period, 2005-2007, has been set at the level of EUR 40 per tonne of CO₂. The level of the fine can be considered sufficiently motivating with regard to the fact that this August the price of permits was approximately 9 EUR/t and in the past 18 months has ranged between 6 and 13 EUR/t.

According to the National Allocation Plan, for plants placed into operation by the end of 1998, the basic level of permits has been determined with regard to the real volume of CO₂ emissions discharged from a particular plant over the period 1999 – 2001 (after omitting the year in which emissions were the lowest), and with regard to the presumed growth in the sector into which the plant is classified. Furthermore, in accordance with criteria stipulated in advance, operators may ask for three types of bonuses to the basic allocation – i.e. additional permits. The "bonus for timely measures" can be obtained by operators of facilities in which, since 1990, investment in up-to-date technology has been carried out demonstrably resulting in CO₂ emission abatement (at least by 5%), and the investment was carried out without being enforced by national legislation. The "bonus for clean technologies" can be obtained by operators of power and heat cogeneration plants at the level of 430 permits for each GWh of electricity generated in 2003. Furthermore, operators of facilities which serve as district heating sources can require adjustment of the allocation due to normalisation of daily degrees, at the level of 7 permits per TJ of heat sold from a district heating source in 2003.

It is expected that the emission permit trading mechanism can represent an economically effective tool for gradually reducing emissions production. The year 2005 will indicate whether the system has been set up in the right way, and whether the hopes invested in it are well founded.

-jsz-

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Emission trading will be on the agenda of a special section of the EEBW 2004 conference. For more details, visit www.eebw.cz and the 3rd page of this issue of News at SEVEN.

EEBW: Energy Efficiency Business Week 2004



Following the accession of the Czech Republic and another nine states to the European Union, their national energy and environmental legislation has undergone changes. How these changes are proceeding, how and when national legislation must be amended, and what specific changes EU accession has brought about in the energy sector and in terms of environmental protection - all this will be the subject of discussions at the 9th international specialist conference EEBW: Energy Efficiency Business Week 2004.

EEBW: Energy Efficiency Business Week is traditionally one of the leading conferences pertaining to efficient energy use in the Central and Eastern European region. Every year the international conference focuses on specifically selected topical issues. This year we will concentrate on economical energy management in European Union directives. The crux of the matter will be implementation of European Union directives concerning the energy industry and the environment in the legislation of the new EU member states.

Themes for discussion

The overarching theme of the professional discussions, which form an integral part of this international conference, is a combination of practical experience from specific project implementation with information about all significant aspects and trends influencing decision-making and enterprise in the area of energy efficiency.

Conference seminar structure:

- Energy policy in the EU and the acceding countries
- Energy and the environment: project financing, EU programmes, structural funds
- Electricity and gas market liberalisation and related EU directives
- Emissions trading in the European Union
- Energy services and end-use efficiency
- Renewable energy sources

- Sustainable development of residential complexes and low-energy architecture
- Energy in buildings and panel-based constructions

Key speakers:

Libor Ambrozek, minister, Ministry of environment CR
Josef Fiřt, chair, Energy Regulatory Office
Randal Bowie, EC DG TREN
Vratislav Ludvík, head of Board of Trustees, Pražská plynárenská, a.s.
František Plecháč, director, State Energy Inspection
Ralf Goldmann, section director, Berlin Energy Agency
Ivo Slavotínek, executive head, MVV Energie CZ s.r.o.
Josef Bubeník, director, Czech Energy Agency
Havard Malvick, European Commission DG TREN
Didier Bosseboeuf, ADEME, France
Walter Hüttler, E.V.A. – the Austrian Energy Agency
Ilari Aho, Motiva, Finland

Keynote speakers will include representatives of the European Commission, the Ministry of Industry and Trade of the Czech Republic, the Ministry of the Environment of the CR, public administration and municipalities from the Czech Republic and abroad, regional electricity and gas suppliers, companies providing energy services through EPC and EC, and others.

The international conference will be accompanied by: business and trade meetings or consultancy and information services or specialist

excursions or social activities or professional media coverage and company presentations on the topic or a press conference.

Who is the conference intended for?

Investors, top management and decision-makers in companies and public administration, entrepreneurs in energy saving and renewable sources, energy producers and traders, technical and economic specialists, energy auditors, legislators and professional groups focused on energy legislation in EU countries, designers and other specialists.

Under the auspices of

The Ministry of Industry and Trade, the Ministry of the Environment, the Czech Energy Agency, the Economic Chamber of the Czech Republic

Media partners:

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If you are interested in attending the conference, please fill in and send us the attached application or visit the website, www.eebw.cz, from which it is possible to send us a contact form by e-mail.

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EEBW: Energy Efficiency Business Week 2004 Programme at a Glance

TIME	9. 11. 2004	TIME	10. 11. 2004	
	SECTION A		SECTION B	SECTION C
9.30 – 10.30	Policy opening	9.00 – 10.30	End use efficiency and energy services	Building energy efficiency, renovation and low-energy construction
11.00 – 12.30	Implementation of EU Directives	11.00 – 12.30	End use efficiency and energy services	Building energy efficiency, renovation and low-energy construction
14.00 – 15.30	Liberalised electricity and gas markets	14.00 – 15.30	Financing and structural funds	Renewable energy sources
16.00 – 17.30	Liberalised electricity and gas markets	16.00 – 17.30	EU emissions trading	Efficient Lighting
18.00 – 22.00	Formal Dinner	18.00 – 22.00	Cocktail	

News from Czech legislation

At the present time, the Chamber of Deputies of the Parliament of the Czech Republic is discussing in the second reading the government bill on support for electric power and thermal energy generation from renewable sources, and the government amendment to the Energy Act. In early September, the Economic Committee and the Committee for Public Administration, Regional Development, and the Environment read both bills which – if passed – should come into force at the beginning of 2005.

Bill on support for use of renewable energy sources

This August's new version of the bill on support for electricity and thermal energy generation from renewable sources, drawn up jointly by the Ministry of the Environment and the Ministry of Industry and Trade, provides producers of electric power from renewable sources with the possibility of selecting their means of support: by compulsory purchase, or through a "green bonus" to the electricity market price. Additional

costs on the part of distribution companies connected with compulsory purchase of electricity are proposed to be charged by means of deviations from the planned demand loads of individual distribution companies for covering losses.

The bill offers the possibility of supporting generation of electricity from renewable sources in an extremely robust, although obviously very expensive, manner. It is precisely this support system's costliness which, if some component problems remain unresolved, can eventually become an obstacle to feasible and effective support for new sources of electric power from renewable sources.

Regarding new and reconstructed thermal energy sources, the bill proposes an obligation to generate at least 10% of heat from renewables. Exempt are gas sources and sources for which an audit proves that the initial outlay would increase by more than 50%.

Amendment to the Energy Act

Pursuant to the current Energy Act, on January 1, 2005 all customers apart from households

will become eligible customers on the electric power market. All eligible customers have the possibility of purchasing electricity from any merchant, not merely from their present regional energy distribution company.

The prepared Energy Act amendment accelerates the opening up of the natural gas market. As of January 1, 2005 the market becomes open to all final customers, except households, with installed continuous gas measurement and data communication. From 2006 on the competitive electricity market for all customers will be open, and as of 2007 the natural gas market should be open to all customers.

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More information concerning this topic is available in the "Rules and Organisation of the Energy Market – Trade in Electricity and Gas" section of the international EEBW 2004 conference that will be held on November 9 and 10 at the Prague Congress Centre.

Second electricity supplier to offer power from renewable sources

On May 1, 2004 Pražská energetika (PRE, Prague Energy Utility) became the second domestic supplier offering its low-voltage network customers (consumer categories C and D - households and entrepreneurs) electric power derived exclusively from renewable energy sources.

In comparison with "traditional" electricity, the new rate, bearing the name PREKO, will be 10 hellers per kilowatt-hour more expensive; and Pražská energetika will use these funds, increased by 100 thousand CZK (over 3100 Euro) just by PRE itself, for the development of facilities for generation of so-called green electricity. In 2003 its customers were supplied with approximately 0.75% of electric power from renewable sources.

The first supplier to offer electric energy from renewables was Západočeská energetika



(ZČE, West Bohemian Energy Utility) (see News at SEVEN 2/2002). Under the title "Green Energy", ZČE has also supplied it with a surcharge of 0.10 CZK/kWh. In 2003 it sold it in the volume of 9.5 million kWh, or CZK 780 thousand (excluding VAT, some 24600 Euro), which is to be redistributed among projects selected in tenders. By June 2004 this ZČE product had about 280 customers, 80 of which were firms.

Customers of the two companies who purchase electricity from renewable sources obtain a label (households) or a certificate (entrepreneurs) they can use for promoting their own activities. To order the product, a telephone call to the company's customer line suffices.

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More information:

Pražská energetika: www.pre.cz/prekol

Západočeská energetika:
www.zce.cz; www.energienet.cz

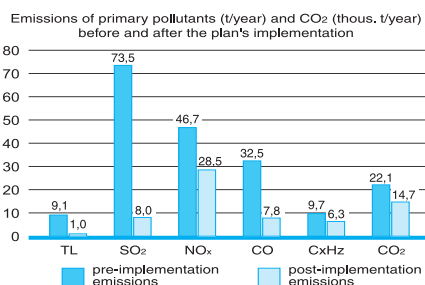
Further information about the experience with using renewable energy sources in the Czech Republic and other EU countries will be provided to visitors at the EEBW 2004 conference session on that topic, to be held on November 10, 2004 at the Prague Congress Centre.

Refurbishment of district heating in Jindřichův Hradec will bring benefits to both users and the environment

On April 22, 2004 refurbishment of the district heating system in Jindřichův Hradec was launched. Among other things, it entails conversion from heavy fuel oil combustion to natural gas and biomass. Owing to this rehabilitation, which has obtained a positive evaluation for support from the Phare fund and the State Environmental Fund, emissions of basic pollutants will be reduced by approximately 86%, and CO₂ emissions by 1.3%, while use of renewable energy sources will increase.

Refurbishment of the heating system is being carried out on the basis of the Energy Plan drawn up by SEVEN at the request of the town. The plan analysed the present status of the town's fuel and energy supply, and submitted ideas for its possible future development. The main part of the document is a comprehensive design for reconstruction of the municipal heat supply from two isolated steam district heating systems, Vajgar and U Nádraží. It presumes ecological modernisation of heat management using biomass and natural gas, particularly in terms of reducing greenhouse gas emissions as the result of using renewable energy sources, also envisages conversion from a steam to a hot-water/warm-water system, and sets out the operational economics and the affordable heat price for the final consumer. The savings potential has been set at the level of 9,383 GJ in fuel, and the implementation will require capital costs totalling CZK 137.6 million.

The project entails modernisation of two Jindřichův Hradec independent district heating



systems serving a total of 15,000 inhabitants. Within the project, it will be possible to extend the "U nádraží" district heating system in particular. This system will be based on a new warm-water source with an installed capacity



of 6 MW using biomass, and with an auxiliary backup gas boiler plant for heat generation and supply for 924 flats and retail and service premises, which will allow for connection of other consumers in the future. The second long-distance heating system will be implemented on the "Vajgar a Hvězdárna" housing estate. There, a gas hot-water boiler plant with an installed output of 30 MW, operating in tandem with a cogeneration unit with an installed output of 150 kW for electricity and heat generation, will be mounted. Heat will be supplied to 3,703 flats, two primary schools, a nursery school, and retail and service facilities. An Aquapark and a swimming pool recently have been newly linked to the system, also using solar power to warm up water. Additional consumers (approximately 200 new flats) can be connected to the system in the future. Redevelopment of the district heating system of the firm Teplospol and the Town of Jindřichův Hradec represents one of the greatest heat management improvements in the South Bohemian region, with contributions made by PHARE, the State Environmental Fund, the Czech Energy Agency, and SEVEN. The Energy Efficiency Center prepared the solution up to the level of the construction assignment together with K-projekt Dačice and Teplospol Jindřichův Hradec. Practical implementation is being carried out by ŽS Brno on the basis of project documents drawn up by Energoprojekt Praha and Teplospol Jindřichův Hradec.

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Energy services and energy audits – can they be joined together?

Currently, in accordance with Act No. 406/2000 Coll. on energy economy, a large number of projects are being drawn up. However, many clients do not know (or will not know) what to do with them. Most of them lack the money to finance the measures proposed in the audits, while at the relevant state offices, there are not enough suitable specialists to put the audit results into practice. Verification of the accuracy of the audit data requires a certain amount of time, and the impact of savings measures exceeds the time frame of an electoral period. It appears that one of the ways to facilitate the overcoming of these difficulties is use of the service, or met-

hod, of Energy Performance Contracting (EPC).

EPC however is not a panacea for every problem. First of all, it is necessary to ascertain whether this method is suitable to be used for reconstruction of an energy system. The EPC service is characterised by three basic features. They are:

- the primary source of repayments is saved costs in energy consumption;
- the measures installed chiefly reduce end-use energy consumption;
- and an energy service company guarantees the attainment of the proposed level of energy savings.

When providing the EPC service, a long-term legal relationship originates for both the contractor and the customer, with all the attendant consequences resulting from a business relationship. They primarily concern guarantees for energy savings on the part of the contractor, and for the level and manner of the use of buildings on the part of the customer.

Energy audits usually do not contain information detailed enough for its use in carrying out the service without verification and possible modifications. This not only relates to the level of energy consumption and the manner of operating and using buildings, including the

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Energy services and energy audits – can they be joined together?

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existing level of interior comfort (interior temperature, illumination level, etc.), but also relates to evaluation of the proposed adaptations or measures and the volume of the resulting attainable savings.

Acceptance of audit data without verification would mean too great a risk for the EPC service provider, while, on the other hand, its verification represents a wasteful outlay of money. The question arises of whether this discrepancy can in any manner be circumvented. It appears that an energy audit can only be completed during the course of a tender (pursuant to the new Public Procurement Act, during the course of a tender on a proposal) or even after its completion. It may serve for verification of the offered solu-

tions or as basis for their evaluation; it can also suggest improvements or extensions of savings measures in addition to the solution offered.

Hence, an energy audit is not a necessary condition for using the EPC method. The preparation and application of EPC is based on a thorough assessment of energy consumption and a profound elaboration of energy-saving measures; however, it does not encompass aspects that are not interesting for energy savings in economic terms. An energy audit drawn up for the needs of EPC primarily focuses on technological, dynamic parts of an energy system with estimates of capital costs bearing on actually attainable prices.

As has already been mentioned, this is not always the case with non-purposefully proces-

sed energy audits. A lot of space in them is devoted to building elements and structures, whereas not much is left for minute description of technological components, in-depth price analysis of recommended savings measures, and estimates of savings on the basis of experience from energy-saving projects already implemented.

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Energy services, presentation of specific projects, use of energy audits, and actualisation of EU directives on savings in final energy consumption by means of supporting energy service development will subjects of discussion at the EEBW 2004 conference. For more information, visit: www.eebw.cz.

Question for:

Miroslav Marada
EPC Division Manager
MVV Energie CZ

What is your experience with energy audits drawn up compulsorily pursuant to the Energy Economy Act, and with their use in Energy Performance Contracting projects?

In our experience, when discussing with customers the possibilities of implementing energy-saving projects in their buildings on an economically self-financing basis, we have frequently encountered the situation that they have already drawn up energy audits for their premises. Customers then provide them to us as documents for familiarising ourselves with the given building's condition. Unfortunately, alongside truly valuable and professionally executed audits, there are also many audits which are unusable for our purposes. The two most frequently repeated reasons are: either the audit was badly prepared, not reflecting the true state of things and containing material errors, or the audit is correct in material terms but is useless and practically inapplicable.

As regards the former case, we have also encountered audits which customers only had drawn up by reason of the necessity to comply with the legal obligation, and who therefore lo-

oked for the cheapest contractor. Emphasis here is put on formal processing, with the information value being second-rate. The conclusions of such audits cannot in most cases be meaningfully implemented, due to the superficial approach to their elaboration. In the worst cases, we have come across missing buildings or wrongly described technologies.

In the latter case, the auditor may have described the building's condition and technologies correctly in material terms, but the audit's applicability is minimal. For instance, the auditor describes all the technically feasible energy-saving measures, even though he himself estimates a return on a number of them beyond the horizon of 30 years, and thus it is obvious that the owner would not be interested. Other auditors only focus on construction measures which are also known for having a long payback period. In the individual audit scenarios the auditor then concentrates on deliberations about whether, figuratively, and sometimes also literally, it is better to use 15- or 20-centimetre insulation. Again, in a formal respect, this procedure is fully consistent with the respective regulations. Nevertheless, a client with his head screwed on will hardly ever voluntarily carry out such recommendations. Thus, the successful exploitation of money expended on such an audit with the help of future implementation of saving measures is doubtful indeed.

However, it would be interesting as an experiment to assign auditing for one building to several auditors in parallel, and then compare the

results. Audit recommendations and, unfortunately, also technical-economic calculations are to a certain extent the outcome of the subjective experience of a particular auditor and his professional focus. When preparing a project we therefore cannot rely on any audit, and prior to signing a contract on implementation of a project for which we are to guarantee a return on input investment on the basis of the EPC principle, we must carry out our own thorough examination of the initial conditions and make our own assessment of future savings attainable through the measures we propose. In all fairness, through this examination we usually confirm the conclusions and recommendations of some audits, or we only differ in unessential details, but how on earth can we know this in advance?

Accordingly, if an owner of a building or some piece of technology assigns the drawing up of an energy audit, he should think through and properly discuss in advance what benefits he expects from his investment, say, in what time frame and financial terms he would like to invest in savings. Otherwise, the owner actually risks receiving a "book" which does not entirely have to be about his property, and whose proposals will not be implemented.

Miroslav Marada
EPC Division Manager
MVV Energie CZ
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Question for:

Luboš Průcha
Division of regional development,
planning and building permit
administration and investment
Regional development department
South Bohemia Regional Office

What is your experience with energy audits drawn up compulsorily pursuant to the Energy Economy Act and their use when implementing energy-saving projects for buildings owned by the region?

For the sake of complying with the Energy Economy Act, approximately 60 energy audits have been drawn up for buildings owned by the South Bohemia Region, mainly education and health-care facilities. Auditors were selec-

ted through tenders, where in addition to price, the presumed output quality was also crucial for us. Unfortunately, we were not interested in carrying out audits for all buildings in our property within the scope and time frame stipulated by the law. The state has actually forced us to spend significant sums of money on the elaboration of studies which, in most cases, will not bring a return to us from saving measures.

At the heart of the matter is the fact that our region only has at its disposal a limited budget for investment, therefore, we cannot implement all measures which immediately follow from the completion of work on an audit that had to be drawn up within a term set by the law. In addition, some auditors have recommended to us measures whose payback is too long and are unfeasible for various reasons.

Unfortunately, material errors have occurred with several audits, which thus made them even less valuable. They include, for instance, the recommendation to carry out structural insulation of buildings' walls in cases when re-

placement of windows would have resulted in greater savings with lower capital costs. Another example is the proposal for outer insulation of protected historical buildings, which, of course, will not be permitted. Perhaps the "most visible" error was an entire building missing from one of the energy audits.

If the Energy Economy Act did not prescribe the drawing up of audits for us, we would consider their gradual implementation according to our investment possibilities for financing saving measures. In this way we risk that in the future we would have to have another audit elaborated for the same building.

Luboš Průcha
Division of regional development,
planning and building permit administration
and investment
Regional development department
South Bohemia Regional Office
www.kraj-jihocesky.cz

Conferences



September – December 2004

ELO SYS

Trade fair of electrical technology, electronics and power engineering

19. – 22. 10.

TMM Trenčín Exhibition Grounds, Slovakia

Contact: Výstavisko TMM, a.s.

www.elosys.sk

Sustainable Energy, Energy Efficiency and Environmental Solutions Expo 2004

19. – 21. 10.

Olympia, London, Great Britain

Contact: IIR Exhibitions

www.energy-expo.info

TZB

12th international exhibition of building equipment

20. – 24. 10.

Incheba Bratislava, Slovakia

Contact: Incheba Bratislava, a.s.

www.incheba.sk

Renexpo 2004

International trade fair and conference on renewable energy sources and energy savings

21. – 24. 10.

Exhibition Centre Augsburg, Germany

Contact: erneuerbare energien

Kommunikations- und Informationsservice GmbH

www.renexpo.de

Ekoenergie

5th independent exhibition linking up with a conference on renewable energy sources

4. – 6. 11.

Flora Olomouc Exhibition Grounds, Czech Republic

Contact: Omnis Olomouc, a.s.

www.omnis.cz/stavo

EEBW 2004: Energy Efficiency Business Week 2004

9th international conference and specialist exhibition

9. – 10. 11.

Zagreb Fair

Prague Congress Centre, Czech Republic

Contact: SEVEN, o.p.s.

www.svn.cz

Pollutec East and Central Europe

International professional environmental trade fair

10. – 12. 11.

Messezentrum Wien Neu, Austria

Contact: Reed Exhibitions

www.pollutec.at

For Arch

Exhibition of civil engineering, housing and energy efficiency

1. – 13. 11.

Metropol Cultural House, České Budějovice, Czech Republic

Contact: ABF, a.s.

www.bvv.cz/msv

Aquatherm

11th international specialist trade fair on heating, ventilation, air-conditioning, metering, regulation and ecological

23. – 27. 11.

Prague - Holešovice Exhibition Grounds, Czech Republic

Contact: Incheba Praha, s.r.o.

www.incheba.cz



9th international conference

EEBW: Energy Efficiency Business Week 2004

9. – 10. November 2004 Prague Congress Centre

www.eebw.cz

Implementation of EU directives focused on the use of energy and environmental protection

- Liberalised electricity and gas market and related EU directives
- Emission trading in the EU
- Energy and environment: Project financing, EU programmes, structural funds
- Renewable energy sources

- Energy end-use efficiency and energy services
- Sustainable urban development and low energy architecture
- The Energy performance of buildings
- Eco-Design requirements for Energy-using Products

Who should attend:

Government and local administration representatives of Central and Eastern European countries • energy consumers • financial institutions • investors • professional associations and guilds • energy suppliers • companies providing energy services • producers of energy saving equipment • experts focused on the energy legislation in EU countries • research and educational organisations

All visitors are welcome to take part in the discussions about application of the EU directives in the local legislation and their impacts in practice.

Under the auspices:
Ministry of Industry and Trade
and Ministry of the Environment of the Czech Republic



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