



Audit conclusion from audit No.

07/02

Financial Means Expended on Air Quality Protection

The audit was listed in the audit plan of the Supreme Audit Office (SAO) for 2007 under number 07/02. The audit was managed and the audit conclusion drawn up by Member of the SAO Ing. Zdeněk Brandt.

The aim of the audit was to check the management of finances levied and used in the field of air protection.

The audit period was the years 2003 to 2006; in case of factual connections, the preceding and/or subsequent periods were also scrutinised.

The audit was conducted in the period from January 2007 to June 2007 by an SAO audit team from Division III and from the regional departments of South Bohemia, South Moravia, Northeast Bohemia, Central Bohemia, Central Moravia and West Bohemia.

The audited entities were as follows:

- A. Ministry of the Environment (MoE); State Environmental Fund of the Czech Republic (SEF); Czech Environmental Inspectorate (CEI);
- B. South Bohemia region, South Moravia region, Olomouc region, Pardubice region, Plzeň region, Central Bohemia region, Vysočina region and Zlín region; Interest Association of the Municipalities of Mrákotínsko for Gasification, association of municipalities; POD BUKOVOU HOROU, association of municipalities; Uničov town, district of Olomouc; town of Holešov, district of Kroměříž; town of Vimperk, district of Prachatice; town of Zruč nad Sázavou, district of Kutná Hora; town of Boskovice, district of Blansko; town of Divišov, district of Benešov; municipality of Jihlávka, district of Jihlava; municipality of Vidonín, district of Žďár nad Sázavou; municipality of Týn nad Bečvou, district of Přerov; municipality of Pomezí, district of Svitavy; municipality of Březnice, district of Zlín; municipality of Putim, district of Písek; municipality of Běšiny, district of Klatovy; municipality of Chotíkov, district of Plzeň-sever; municipality of Božice, district of Znojmo.

Objections to the audit protocols filed by CEI, Plzeň region and the town of Zruč nad Sázavou were addressed by means of decisions on objections issued by heads of audit teams. The appeal filed by the town of Zruč nad Sázavou was dealt with by means of a resolution of the SAO Senate.

At its session of 2 October 2007 the SAO Senate

(composed of: Ing. Zdeněk Brandt – chairman, Ing. Jiří Adámek, Ing. Ludmila Brynychová, Ing. Ladislav Zeman – members)

approved by Resolution No. 07/02/18

the audit conclusion as set out hereunder:

I. Introduction

Audit No. 07/02 is part of coordinated audit of Management and Utilization of State Financial Means Allotted for Air and Ozone Layer Protection and Implementation of Related International Agreements, executed in parallel with audit institutes of the Slovak Republic (coordinator), the Republic of Slovenia and the Republic of Austria. For the same reason, a considerable part of the audit was devoted to the implementation of the Czech Republic's commitments at international level and compliance with obligations stemming from Community law.

II. Implementation of international treaties, Community law

1. Air pollution

1.1 *Convention on Long-range Transboundary Air Pollution (CLRTAP), attached protocols and related Community law*

The Convention entered into force for then Czechoslovakia in 1984. It is a framework convention and a number of obligations are rather general in nature. The parties undertake to pursue policies and strategies to combat the discharge of air pollutants; they are to exchange information and review measures to combat the discharge of air pollutants. The Convention focuses on **reducing emissions** of pollutants**, taking into consideration technical and economic feasibility and the impact on the environment, with a view to reducing long-range transboundary air pollution.

The Convention was followed up by eight protocols focusing on the monitoring and valuation of long-range transmission of pollutants, the reduction of emissions of sulphur and nitrogen oxides, volatile organic compounds (VOC), heavy metals and persistent organic pollutants. The protocols were implemented into national regulations.

The most recent – the Gothenburg Protocol – was concluded in 1999; the Czech Republic ratified it in 2004, and it entered into force in 2005. Its objective is to restrict emissions of sulphur oxides, nitrogen oxides (NO_x), NH₃ and VOC which are the result of human activity and which, after long-range transmission, have a negative effect on human health and natural ecosystems. The principal means of achieving this goal is by setting national emission ceilings for these substances. The Gothenburg Protocol's national emission ceilings were applied by the government in advance in its Order No. 351/2002 Coll., setting forth mandatory emission ceilings for certain air pollutants and preparation methods and performance of emission inventories and emission projections, in the wording as effective until 9 December 2003. The up-to-date emission inventories and emission projections indicate

** Emissions means the discharge of substances into the air expressed in units of mass. "Emissions" means air pollution expressed in terms of the concentration of the pollutant by mass.

that the Czech Republic is implementing its commitments and that its commitments can also be expected to be fulfilled in the target year 2010.

In connection with the Czech Republic's accession to the European Union (EU), the government adopted Order No. 417/2003 Coll., amending Government Order No. 351/2002 Coll. and implementing Directive 2001/81/EEC of the European Parliament (EP) and the Council on national emission ceilings for SO₂, NO_x, VOC and NH₃ up to 2010. Implementing the commitments is one of the fundamental goals of the *Integrated National Emission Reduction Programme of the Czech Republic* and is also part of the *National Programme for Reduction of Emissions of the Czech Republic*. MoE documented that the Czech Republic is implementing the Convention's framework tasks, fulfilling commitments of all the protocols and the requirements of the directive.

1.2 Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

The directive was implemented into national legislation by Act No. 86/2002 Coll., on air protection and amending some other laws (the air protection act) and by its amendment - Act No. 92/2004 Coll. and by Government Order No. 597/2006 Coll., on air quality monitoring and assessment. In the case of this directive, monitoring found that the conditions laid out therein were not being met. It was stated that the failure to implement obligations dates back to 1 January 2005; discharges exceeding limit values of certain pollutants in ambient air are monitored and duly reported in line with the procedures required by Council Directive 96/62/EC.

In the territory of the Czech Republic this monitoring detects thresholds of certain pollutants being exceeded, specifically PM 10^{***} particles and benzo(a)pyrene. **The Czech Republic is at risk of incurring European Commission sanctions for failing to satisfy Community law requirements.** MoE paid suitable attention to the problem of excess levels of certain pollutants in the air and approaches to tackling them are a priority in conceptual documents.

1.3 Directive 2001/80/EC of the EP and of the Council on the limitation of emissions of certain pollutants into the air from large combustion plants

The directive was implemented by Government Order No. 112/2004 Coll., on national programme for reduction of emissions of solid pollutants, sulphur dioxide and nitrogen oxides from existing particularly large combustion stationary sources of air pollution. This government order lays down SO₂ emission ceilings for individual particularly large sources. It also defines regional emission ceilings for solid pollutants, SO₂ and NO_x. The order also defines emission ceilings for solid pollutants, SO₂ and NO_x of particularly large combustion plants for the Czech Republic as a whole. The regions issue decisions instructing individual operators to comply with the emission ceilings restrictions in the form of emission reduction plans. The drafting and implementation of these plans and the duty to comply with emission limits are the key instruments of this national programme.

SO₂ emission ceilings for particularly large combustion plants will be in effect from 1 January 2008. MoE documented that at the time of the SAO audit it was drawing up an

*** PM 10 are particles that are defined in government regulation no. 350/2002 Coll., defining imissions limits and the conditions and manner of monitoring, judging, assessing and managing air quality.

estimate of future compliance with emission ceilings. This estimate is based on an assessment of updated emission projections that operators were obliged to submit to the regions by 30 June 2007 under a decision on approval of emission reduction plans.

1.4 *The State Environmental Policy of the Czech Republic (SEP)*

SEP was approved by the Government Resolution No. 235 of 17 March 2004. The assessment of SEP submitted by MoE as of 30th June 2007 was done in the form of showing different indicators and their development. Air quality indicators show different developments depending on what they are related to. Whereas CO₂ and NO_x emissions have developed positively relative to gross domestic product (GDP) and domestic consumption of primary energy sources, they have not improved in relation to population size or territorial unit. One explanation for this stagnation is the considerable amount of electricity generated for export. Although the monitored indicators do not cover all important problems, e.g. that a considerable part of the population suffers from excess concentrations of certain pollutants in the air, in MoE's opinion SEP is expected to remain the fundamental policy document until 2010 as planned.

The pace of environmental improvement slowed down in the period under scrutiny. That is largely due to strong economic growth that is not accompanied by reductions in energy and material consumption.

1.5 *Integrated National Emission Reduction Programme of the Czech Republic*

The Programme was approved by the Government Resolution No. 454 of 12 May 2004 and MoE updated it in 2005. It can be regarded as a specific Programme with goals that can be assessed, especially where the limits, ceilings and time limits are set down in legislation. The most important instrument for improving macro emission and also ambient air quality indicators are normative, legislative measures. Additionally, the Programme contains a number of other instruments, including economic ones. The Programme focuses on all pollutants for which national legislation sets emission ceilings or limit values in the ambient air (SO₂, NO_x, NH₃, CO, Pb, Cd, Ni, As, Hg, VOC, benzene, polycyclic aromatic hydrocarbons) and also covers greenhouse gases.

MoE presented materials containing assessments of implementation of the department's tasks and the Programme's objectives in individual years; the vast majority of tasks had been performed and the achievement rate of objectives was developing positively. The Programme presented an optimistic assessment of the development of the emission situation from 1990 to 2003 – it is certain or at least highly probable that the emission ceilings for SO₂, VOC and NH₃ laid down by the protocols to the Convention (CLRTAP) in particular and by Community law should be met. According to the Programme, however, there was a high risk that the national NO_x emission ceiling would not be achieved; there were also problems indicated in exceeding NO_x limit values in ambient air.

1.6 *National Programme for Reduction of Emissions of the Czech Republic*

The Programme was approved by the Government Resolution No. 630 of 11 the previous programme's conclusions, the parts assessing the current state of affairs are highly critical – it states, for example, that after a significant reduction emissions are now June 2007, replacing the *Integrated National Emission Reduction Programme of the Czech Republic* after

that had applied for around three years. Although it adopted some of stagnating (but not overstepping the defined ceilings) and air quality is if anything getting worse. Instead of talking about reducing emissions, it is now a question of stopping the increase in air pollution.

The Programme's "global goal" is to reduce the presence of substances damaging ecosystems and human health in the environment. Besides the meeting of emission ceilings for the basic substances, "other goals" focus on compliance with the defined limits of pollutants in ambient air, in particular PM 10 particles and benzo(a)pyrene. Accordingly, the Programme monitors quantitative emission and ambient air quality indicators. Emission indicators have a target set in 2010 and ambient air quality indicators in 2015. The *National Programme for Reduction of Emissions of the Czech Republic* can be regarded as a document with clearly defined goals and timed activities. It contributes to the protection of ecosystems and, most importantly, is in line with the population's interest in improving quality of life.

1.7 Regional emission reduction and air quality improvement programmes

The obligation to draw up regional (local) emission reduction programmes and regional (local) air quality improvement programmes is set down in the air protection act as a significant means for achieving emission and ambient air quality targets and at the same time for application of decision-making process at the local level. MoE drew up and published methodological instructions for preparation of programmes and instructions to support the air protection authorities responsible for these programmes. MoE also methodologically managed the preparation of emission reduction plans and plans for the introduction of good agricultural practice.

During the second half of 2004 MoE commissioned an external assessment of regional emission reduction programmes and territorial energy policy. Among other things, it was found that although the regional programmes and territorial policies concurred in their general goals, the specific measures and targets were not aligned with other policies and programmes. Most programmes and policies lacked specific measures and instruments for achieving the identified goals. If any instruments were proposed, there was no way of assessing whether these will result in achieving goals in an effective and efficient way. The incurred costs were not quantified – it was not possible to assess whether the proposed goals were achievable.

Based on this assessment of regional programmes MoE took steps to remedy their shortcomings. Above all, an amendment of the air protection act made it obligatory to draw up programme annexes containing specific measures as part of the programmes. Additionally, the regions could make use of other methodological materials prepared by MoE when updating their programmes. In the future, SEF projects that will be supported should chiefly be those that are part of or in line with regional programmes.

2. Climate protection

2.1 *UN Framework Convention on Climate Change and Kyoto Protocol to the UN Framework Convention on Climate Change*

The Convention focuses on the monitoring and reduction of greenhouse gas emissions, in particular CO₂, and the Czech Republic acceded to it in 1993. The Convention's aim is to put in place the right conditions for the rapid stabilisation of the concentration of greenhouse

gases in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. In 2001 the Czech Republic already ratified the *Kyoto Protocol to the UN Framework Convention on Climate Change*, which aimed, for the first 2008-2012 “commitment period”, to reduce greenhouse gas emissions by 8% compared to 1990 levels.

On 25 April 2002 the Council adopted Decision 2002/358/EC concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the UN Framework Convention on Climate Change and the joint fulfilment of commitments thereunder. In line with this decision the Commission adopted Decision 2006/944/EC of 14 December 2006 determining the respective emission levels allocated to the Community and each of its Member States under the *Kyoto Protocol* pursuant to Council Decision 2002/358/EC. This ceiling is a realistic target for the Czech Republic, as, according to the 2004 inventory, the total quantity of the Czech Republic’s emissions converted to CO₂ was approx. 147 million tonnes, whilst the average annual limit in the Community decisions is greater than 180 million tonnes in the years 2008-2012.

Total greenhouse gas emissions in the Czech Republic fell by 27.5% from 1990 to 2005. The development of emissions indicates that the stabilisation trend will continue and total greenhouse gas emissions in the 2008-2012 period should be more than one third lower than in 1990. It is therefore reasonable to assume that the Czech Republic will meet its national reduction target of 8%. Nevertheless, indicators correlating aggregated emissions to population size or unit of GDP remain very unfavourable for the Czech Republic, despite the mentioned fall in emissions since 1990.

2.2 *National Programme to Mitigate the Impacts of Climate Change in the Czech Republic*

The Programme was approved by the Government Resolution No. 187 of 3 March 2004 and is the updated *Strategy of the Protection of the Climate System of the Earth in the Czech Republic*. The purpose of the Programme is to identify ecologically and financially acceptable measures to reduce greenhouse gas emissions to ensure that the *Kyoto Protocol* reduction targets are met. Another formulation of the Programme’s goals is that by 2020 all emissions and energy indicators will be stabilised at the average EU levels in the year 2000, whereby the gradual approximation to the EU level will take place so that most of these targets are achieved in 2012.

Energy, or rather the public energy sector, accounts for approx. 65% of all greenhouse gas emissions in the Czech Republic divided among production sectors, 68% of which is emissions caused by electricity generation. When setting measures for achieving the reduction targets in the *National Programme to Mitigate the Impacts of Climate Change in the Czech Republic* the priority is to reduce energy intensiveness in the area of Czech production and consumption. The Programme does nothing to reduce the high proportion of greenhouse gas emissions accounted for by electricity generation for export, even though the ratio between export and domestic electricity consumption was approx. 1:3.6 in 2004. Reducing emissions from electricity generating sources is not realistic unless it is accompanied by a corresponding adjustment of emission ceilings linked to the proportion accounted for by generation of electricity for export.

2.3 Directive 2003/87/EC of the EP and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 1996/61/EC

Greenhouse gas emission allowance trading is one of the mechanisms the European Community created to make good its commitment to reduce greenhouse gas emissions within the framework of the *Kyoto Protocol*. It is based on the concept of tradable CO₂ allowances allocated by the state to significant greenhouse gas generators. Act No. 695/2004 Coll., on the conditions of greenhouse gas emission allowance trading and amending certain laws, and Government Order No. 315/2005 Coll., on the National Allocation Plan of the Czech Republic for the Years 2005 to 2007, regulate this issue in the conditions of the Czech Republic.

2.4 National Allocation Plans – greenhouse gas emission allowances

MoE is responsible for preparation of national allocations plans (NAP). A working group, made up from representatives of MoE, Ministry of Industry and Trade and their organisations and industrial associations representing businesses in all key sectors concerned, was set up to prepare the first NAP for the first trading period 2005-2007. The key materials NAP 1 was based on were data on emission sources from the register of emissions and sources of pollution kept by the Czech Hydrometeorological Institute and data on greenhouse gas emissions in the years 1999-2001 provided by individual businesses. The European Commission defined an emission ceiling of 97.6 million tonnes of CO₂ per year for the Czech Republic for the first trading period (so called allocation). NAP 1 divided allowances worth a total of approx. 91.4 million tonnes of CO₂ per year among companies classified by sectors. In line with Act No. 695/2004 Coll., MoE entrusted the duty to establish and operate allowance trading register to a joint stock company called Operátor trhu s elektřinou, a.s. (Energy Market Operator).

The SAO audit found that no sector attained the basic allowance allocation in 2005; the sectors' total emissions were reported at 82.5 million tonnes of CO₂ in 2005 and 83.6 million tonnes of CO₂ in 2006. Additionally, differences were found from sector to sector as regards the basic allocation's conformity to the reported and verified actual state in 2005.

The original NAP 2 proposal for the 2008-2012 period – with an allocation of 101.9 million tonnes of CO₂ tonnes for the Czech Republic (increase of 3.4% when compared to NAP 1) – that was submitted to the government by MoE was approved by the Government Resolution No. 1400 of 6 December 2006. The entire increase in CO₂ emission allowances from NAP 1 to the proposed NAP 2 and part of the unused quantities in certain sectors were intended to cover the increase in the basic allowance allocation for the **public energy sector** in particular. This increased allocation was not supported by the corresponding expected growth in this sector. This proposed NAP 2 was not accepted by the Commission, which decided that the Czech Republic's annual allocation would be at most 86.8 million tonnes.

MoE subsequently drew up a new version of NAP 2 based on the allocation defined by the Commission. In this version of NAP 2 the allocation is no longer divided up among sectors but among emission originators, with the 2005 and 2006 averages used as the basic criterion. Compared to the first version of NAP 2, the allocation for individual plants in the second version is more transparent and particular sectors are not favoured.

3. Protection of the ozone layer

The Czech Republic is a state signatory of the *Montreal Protocol on Substances that Deplete the Ozone Layer* from 1987 and all its amendments. Obligations when handling substances that deplete the ozone layer (regulated substances) are also set out by Regulation 2037/2000/EC of the EP and of the Council of 29 June 2000 on controls of ozone-depleting substances, as amended by Regulations 2038/2000/EC and 2039/2000/EC of the EP and of the Council of 28 September 2000. In the Czech Republic this area is governed mainly by the air protection act. Government Order No. 117/2005 Coll., on some measures for the protection of ozone layer, is this act's implementing regulation in the matter of the ozone layer protection.

Obligations and bans established by the air protection act are checked mainly by CEI, which may also impose measures and penalties. The SAO's audit at CEI found that it was fulfilling its obligations. Any air protection authority mentioned in the air protection act may seize regulated substances or products containing them. This penalty was not imposed by either CEI or MoE in the audited period.

The SAO's audit of SEF found that it spent a total of CZK 106.8 million on protection of the ozone layer in the years 2003-2005, mainly in the form of subsidies. That represented 0.2% - 2.0% of all SEF expenditure in individual years; 21 projects were supported.

The documents presented by MoE for the audit indicate that the Czech Republic is fulfilling the requirements of both the Montreal Protocol and Community law on the ozone layer protection.

III. Air protection incomes and expenditures

1. Revenues

1.1 Fees for discharging pollutants

In the air protection legislation, fees for discharging pollutants are conceived as a way of financing improvement of the environment and as an instrument to motivate polluters to reduce their emissions. During the SAO audit, the motivational function of fees for large and particularly large sources of emissions was criticised by the fee administrators – the regions. In the audited period MoE did not propose any specific measures to make this instrument more effective, even though the motivational effect of fees in their existing form is extremely limited.

It was not until 2006 that MoE undertook a comprehensive analysis of the effectiveness of fees, including alternative solutions. This analysis indicates that, among other things, the low level of fees existed before the new air protection legislation (year 2002). Despite this fact the new act adopted the old (low level) way. MoE keeps statistics on the

level of prescribed fees in individual years; in 2003-2005 it was approximately CZK 440 to 480 million per year.

1.2 Fees for production and import of regulated substances

The air protection act fixed the fees for production and import of regulated substances and products containing them at CZK 400/kg of regulated substance. The fees are revenue of SEF and their use is restricted to protection of the ozone layer. The relevant entities are obliged to calculate and pay the fees themselves. According to SEF, CZK 36,609 thous. was levied in 2003 but only CZK 8,108 thous. in 2004. Regulated substances were not produced in the Czech Republic in the audited period and there have been no fee-bearing imports since 1 May 2004. Even after that date regulated substances were used in accordance with the law in the Czech Republic, but these were supplies from EU states, which are not treated as imports once the CR has joined the EU.

1.3 Fines for offences

The imposition of fines by CEI, which is authorised by the air protection act to impose penalties, was scrutinised. The SAO's audit of CEI found that fines tend to be at the lower level of the penalty range defined by the air protection act. Even in cases where fines from CZK 20 thous. to 10 million were permissible, the majority of fines imposed in 2005 and 2006, for example, were up to CZK 100 thousand. One fine of CZK 3.5 million was imposed in 2005 and one of CZK 2 million in 2006. In the 2003-2006 period, the total sum imposed in lawful fines by CEI in connection with air protection was over CZK 74 million. MoE did not assess the effectiveness of fines in terms of the lawful imposition of fines from the given range.

2. Expenditure

2.1 The use of state and regional budget finances

MoE is totally unable to influence expenditure on air protection reported in other state budget chapters in the framework of programme financing expenditure. In the years 2003-2005 the environmental yearbook reported expenditure on air protection at approx. CZK 140 to 250 million per annum (source: Ministry of Finance). MoE possesses no data as to what sums are spent on air quality protection from the state budget chapters other than its own and as to what programmes or projects spending on air protection it is reported under.

The situation is the same with regional budgets, where spending of approx. CZK 230 to 330 million yearly was reported in the same period. MoE documented that it methodologically manages and guides the preparation of programmes drawn up by the regions to reduce emissions and improve air quality. As part of this methodological work it had recommended specific goals, from which the regions selected specific projects and measures for financial support.

2.2 The use of SEF finances

As the administrator of SEF, MoE was responsible for formulating programmes through which SEF supported air protection projects. In the years 2003-2006 the total SEF

expenditure on air protection amounted to CZK 3,222 million, gradually falling from CZK 1,115 million to CZK 403 million (with the share of total expenditure falling from approx. 24% to 16%).

SEF supported a total of 1,396 air protection projects in the 2003-2006 period. For the execution period as a whole, a total of approx. CZK 4,580 million was spent on support of these projects. In addition, loans worth a total of approx. CZK 851 million were provided to different recipients; support of some projects is still ongoing. A sample of 60 projects was audited at SEF. Among other things, the audit found shortcomings in the way eligible costs were defined and checked, in ambiguous definitions of some of the supported projects' parameters and in that documents linked to paid invoices were insufficiently checked by SEF.

The most important programme in terms of the number of projects and level of support was the *Programme of Development of Infrastructure in Small Municipalities* for full gasification of municipalities or parts thereof. 823 projects were supported in the period under scrutiny. Support of these actions amounted to approx. CZK 3.2 billion in total, which is 84% of total support towards air protection.

SEF presents in its financial reports and annual reports ecological effects that are based solely on documentation provided by the beneficiaries and on presumptions that can justifiably be questioned. SEF tolerates the fact that data on energy audits are not duly documented in applications (it accepts, for example, a declaration by municipality representatives) and that pre-gasification solid fuel consumption levels, which are cited as a yardstick for measuring environmental benefit, are evidently exaggerated. The specific financial cost/benefit of the project is thus also distorted. The basic criterion for SEF is the number of connections, in other words consumers, and the assessment of environmental effect is thus based on the flawed assumption that all consumers will immediately and fully switch to gas for heating and hot water. However, given the price of gas some consumers only occasionally use gas for heating. The actual gas consumption in the concerned municipalities or parts of municipalities reveals that calculating the reduction in emissions solely on the basis of the number of people connected to the gas main is not objective.

Actual gas consumption is then merely a fraction of the calculated consumption of gas as cited in both the energy audits and the final assessment of projects done by SEF. The audit found that a municipality's gas consumption in the first year and second year after completion of the project was approx. 9% and 11% respectively of the figures cited in the assessment based on the municipality's declaration. In the same period after full gasification, another municipality consumed approx. 9% and 15% respectively of the natural gas that was mentioned in the energy audit. Under the funding agreement the association of municipalities was supposed to build 1,249 connections; in fact it completed 1,012, and approx. 2.5 years after building approval there were only 310 active consumers. In the first year after building approval was granted (excluding one municipality not yet connected) the actual gas consumption there was only around 2% of the figure given in the energy audit. In the case of another association of municipalities, gas consumption in the fifth year after the project was completed was approx. 20% of the level cited in the energy audit. By these standards, a municipality that in the third year after the project completion achieved approx. 23% of the gas given in the energy audit can be regarded as a success.

In at least 7 of the 14 full gasification actions audited, the project was overvalued in the case of inputs and undervalued in the case of outputs. The figures used to calculate the

absolute reduction in annual emissions of basic pollutants before and after gasification were not mutually comparable. For example, the assessment of the reduction in emissions in one municipality implies that the original consumption of brown coal in the houses where gas was installed was over 30 tonnes per year, which is totally divorced from reality. As regards buildings not yet connected to the gas main, this assessment calculates the consumption of brown coal at just 11.3 tonnes, without any justification offered for this difference (consumption per building of 24.4 tonnes of coal is mentioned in the application). For another beneficiary, the calculation of average annual consumption of coal is more than 20 tonnes per year in connected buildings and over 15 tonnes per year in buildings not yet connected. For these reasons in particular, both the energy audits and the expertises that in many cases concur with them are not objective and are overvalued, both in applications and in assessments of completed actions.

SEF documented that it assesses projects carefully when applications are submitted. The calculation models used to assess air protection projects during the audited period underwent a development and were made more precise. If the emission parameters in the SEF's control calculation differed from the applicant's figures by more than 20%, the application was deemed unsatisfactory. Even so, as the gas consumption shows, there are significant differences between the calculations and the actual state.

However, the ecological effects calculated solely in terms of the number of consumers were not achieved either. In 2004, for example, support was definitively granted to 235 projects; according to SEF the support beneficiaries did not achieve the ecological effects in 146 cases (62.1%).

The minister of the environment empowered SEF to extend the contractual project completion deadlines by at most one year for ongoing projects where the beneficiary was not able to achieve the ecological benefits by the contractual deadline. The empowerment was gradually widened to cover all projects, with up to 3-year extensions possible. At the same time, the penalties for not achieving the ecological effect were gradually reduced. SEF could only demand that the support be returned if the attainment of the ecological effect was lower than 50%; if 50-60% of the target effect was achieved, SEF usually reduced the support by 10%. As a result the penalties were not proportionate to the degree of non-fulfillment, but rather they took into account the municipalities' actual ability to influence this fulfillment. This policy of SEF is justifiable, but it also suggests that the entire support programme is not well constructed. The receipt of applications for support for full gasification was terminated in 2003.

The audit scrutinised 17 beneficiaries of investment support from SEF, which had obtained a total of CZK 184,058,036 for 19 projects by the time of the audit. The principal findings were as follows:

- a) Tenders for contractors displayed a number of shortcomings. The beneficiaries of funding from SEF are bound by the regulations on public procurement; what is more, this obligation was set down in the contract between SEF and a beneficiary (i.e. in the contract they declared that they had chosen a supplier in accordance with the law). The audit found that SEF has no defined methodology for checking selection procedure. It asked beneficiaries to submit basic documents demonstrating how the supplier selection process took place; in case of the audited beneficiaries it did not pay sufficient attention to these

documents. The SAO audit uncovered the following findings concerning 11 projects that received a total of CZK 115,329,520 in support:

- in three cases no public tender was announced; instead, the beneficiaries divided up the public contract into several smaller contracts and used different contracting procedures;
- in three cases applicants who did not submit any confirmation that they have no outstanding debts to the appropriate health insurance and social security authorities were not excluded;
- in one case, the deadlines for bids were not defined in a manner compliant with the minimum timescale of 14 days after delivery of calls for tenders to all applicants;
- in one case the beneficiary did not award a public contract for extra work by means of one of the award procedures provided for by law;
- in five cases beneficiaries did not put in place the right conditions for assessing the comparability of the submitted bids – they did not provide a sheet of prices, a list of works and supplies with a detailed description of the required standards – or they failed to define the conditions under which it was possible to exceed the bid price;
- in five cases the report on the assessment and evaluation of bids did not make it clear how and based on what assessment the jury arrived at its result;
- in two cases the text of the call for tenders was not published at the central address;
- in three cases the beneficiaries did not exclude applicants who, contrary to the tender documentation, did not state the price in the draft work contract as the maximum permissible price.

b) Shortcomings were also found in beneficiaries' cooperation with contractors. In the case of four projects that received a total of CZK 51,766,746 in support it was found:

- in two cases extra work was not documented;
- in one case the unit prices of material, products and work given in annexes to the work contract were increased over the originally agreed prices that should have been fixed for the entire duration of the work;
- in one case it is not possible to determine conclusively whether a municipality only paid for work and supplies that had been already done. The municipality did not make the supplier document its invoices with protocols and lists of supplies and work and did not approve the work done in the manner agreed in the work contract;
- in one case a work contract was not complied with by the supplier (232 connections instead of 286; 1,663 m of connections instead of 2,860 m). Even so the supplier billed the full price of the work at the originally agreed price and the beneficiary paid it. The audit found that the difference was offset by extra work necessitated during building (longer main gas main). SEF did not conclude any annex to the contract with the beneficiary in connection with this change;
- in one case a beneficiary paid for part of the work, contrary to the work contract, before the work was completed;
- in one case a building work log was not presented.

c) Further shortcomings were found:

- in the case of two projects that received a total of CZK 40,829,226 in support, the conditions for inclusion in the full gasification programme were not satisfied – the programme is intended to develop the infrastructure of small municipalities with up to 1,000 inhabitants. At the time of submission of applications two municipalities falsely

declared lower population to meet the defined conditions. SEF did not check these data and both municipalities were included in the programme;

- in the case of eight projects that received a total of CZK 134,085,415 in support, it was found that the contract was violated as regards the use of separate accounts – the beneficiaries thus made it harder to check whether the support finances were spent effectively.

Audit of the regions found that they too violated the separate account provisions of contracts. Insufficiencies were found in five cases.

All eight audited regions received a total of CZK 18,905,719 in non-investment support from SEF as the compiler of territorial programmes for emission reduction and reduction of certain pollutants in the ambient air. Like other beneficiaries of SEF support, the regions also made errors in tenders for suppliers.

It was also found that SEF accepted the amounts stated in applications, and in the subsequently issued ministerial decisions on the provision of support these amounts were awarded without any change. The support provided to individual regions was very different, ranging from CZK 749,000 to CZK 5,733,000. Yet the subject of support was similar – the formulation of regional programmes to reduce emissions and concentration of pollutants in ambient air. The structure and content of these programmes is determined by the air protection act. According to MoE, the regions had different ideas about and requirements for these crucial conceptual materials.

MoE merely presented the assessment of the programme's results given in SEF annual reports. These assessments in reports intended for the public do not constitute the kind of analyses that could provide suggestions for correcting, broadening or terminating funding programmes. They do not reveal how effective they are as instruments for implementing the MoE's air protection policy.

At the time of the SAO audit, MoE and SEF were preparing an *Operational Programme Environment*, which is designed to use finances from EU structural funds in the 2007 -2013 period. This programme will enable substantially more funds to be used on air protection than what was provided in the years 2003-2006. It will also be possible to support measures equivalent to the previous full gasification programmes out of these structural funds. In this context, however, *Operational Programme Environment* documents do not address a fundamental problem – failure to achieve the envisaged ecological effects due to reduced public interest in gas heating as a result of the high price of gas. MoE documented that it had adopted measures designed, in particular, to specify the conditions for selecting supported projects (link to regional and local programmes) and to improve the quality of these projects.

IV. Summary

The Czech Republic's obligations as stemming from international treaties, i.e. the *Convention on Long-range Transboundary Pollution (CLRTAP)* and the attached protocols, the *UN Framework Convention on Climate Change*, the *Kyoto Protocol to the UN Framework Convention on Climate Change* and the *Montreal Protocol on Substances that*

Deplete the Ozone Layer, including its amendments, were implemented during the audited period and it is reasonable to expect that their commitments will be achieved in the future.

The audit found that Community law regulations are being implemented in the Czech Republic. Regulations concerning the reduction of emissions of pollutants, protection of the climate and ozone layer are being complied with. It was found that only Directive 96/62/ES of the Council on ambient air quality assessment and management and related regulations were not being complied with. Limit values for certain pollutants in ambient air are being exceeded in the Czech Republic. The Czech Republic is at risk of being penalised by the European Commission for failing to meet these requirements.

Conceptual documents directly concerning or touching on air protection are drawn up in line with the commitments in international treaties and Community law. The assessment of implementation of the *State Environmental Policy of the Czech Republic* (approved by the government in 2004) as of the middle of 2007 indicates that in the period under scrutiny the pace of improvement of the environment slowed down and in a number of cases the situation stagnated or deteriorated, which also applies to air quality. That is largely connected to significant economic growth that is not accompanied by reductions in energy and material consumption.

The purpose of the *National Programme to Mitigate the Impacts of Climate Change in the Czech Republic* (approved by the government in 2004) is to cut greenhouse gas emissions so that the *Kyoto Protocol* reduction targets are met. It is reasonable to assume that the Czech Republic will meet its target for the first commitment period. Another goal of the Programme is that by 2020 all unfavourable emissions and energy indicators will be stabilised at the average EU levels in the year 2000, whereby the gradual approximation to the EU levels will take place so that most of these targets are achieved in 2012.

The power sector, and in particular electricity generation, accounts for the most greenhouse gas emissions in the Czech Republic. Reduction of energy intensiveness in the area of Czech production and consumption is a priority when setting measures for achieving the reduction targets in the *National Programme to Mitigate the Impacts of Climate Change in the Czech Republic*. However, the Programme's measures do not include any plan to reduce the high share of emissions accounted for by generation of electricity for export. Reducing emissions from electricity generation sources is unrealistic, unless it is accompanied by a corresponding adjustment of emission ceilings for the generation of electricity for export.

The stimulus effect of fees for discharging pollutants into the air is extremely limited in its present form, so their function is primarily fiscal. During the SAO audit, the motivational function of fees was criticised by the regions, which are the fee administrators for large and particularly large sources of emissions. MoE did not undertake a comprehensive analysis of the effectiveness of fees, including alternative solutions, until 2006.

SEF used approx. CZK 3.2 billion on supporting air protection in the 2003-2006 period. MoE did not document any assessment of the programme's effectiveness by SEF that could be viewed as the kind of analysis that provides suggestions for correcting, broadening or terminating the support programmes.

The SAO audit demonstrated that the ecological effects of projects as reported by SEF were strongly overvalued. That particularly applies to the programme under which the full

gasification of municipalities was supported and for which the receipt of applications was terminated for the audited period. In financial terms, this was the dominant programme, however. The criteria for assessing the ecological effects of this programme's projects are not as conclusive and significant as they are claimed to be. Not even these criteria were achieved by beneficiaries in a number of cases. The original consumption of solid fuels was overstated, as was the reduction in consumption of these fuels after the subsidised project was completed.

Under the *Operational Programme Environment* it will be possible to use EU structural fund finances to support measures with a similar focus as the former full gasification programmes. But one fundamental problem remains unresolved – not achieving envisaged ecological effects because of people turning away from using gas for heating.

MoE's coordination and management role in the use of financial means for air protection is confined to programmes supported out of its own budget chapter (Ministry of Environment) and SEF programmes. MoE does not have sufficient information about programmes and projects that receive funding from other state budget chapters.