

Overview of DHC Legislative Framework

Country

Czech Republic

Legislative Framework

1. State Energy Policy (SEP)

There is under process of approval a new State Energy Policy document in the CR. The previous SEP (since 2004) stated the priority of the utmost independency on energy import with high reliability on indigenous coalmines production and nuclear power further development. The government declaration since 2007 changed especially due to the Green party requests. They insist on coal mines limits preservation and no new development of nuclear power in CR. (“Ecological coal mines limits” it means the government decision to protect the territory from the further coal mines, not to destroy two villages.)

The cheapest heat for residential buildings is provided by CHP/DH plants incinerated brown coal in combination with other fuels, for example with biomass. CHP is very effective. Heat production from brown coal in CHP is the most effective way of the sufficient heat amount production for acceptable prices and with conditions friendly too the environment.

The question of coal disponibility to ensure heat delivery from the central sources (especially with CHP) is for DH very important. To switch off the coal to other fuel base in DH (natural gas, biomass) it would be very technically, investment- and also time-intensive. In the case of natural gas it would increase the CR dependence on fuel import, it would increase the price of thermal energy unite up to double present prices. The present situation of uncertainty in coal deliveries (especially for DH plants and energy plants in industry) with regard to the given “ecology limits of coal mines” leads to increasing heat prices and does not enable optimal use of existing energy investments. The present constrains of contracts on coal delivery, mostly to the years 2012 – 2015 with uncertainty to make long terms contracts in time would lead to enforced reconstructions and losses in investments that would not be depreciated. A subsequent increase of electricity and heat

prices would decrease competitiveness of industry and heat (DH) for supply.

These problems have been already outlined in the Report of an independent governmental committee on the CR further energy demand assessment. The Report stated, that in middle and long term view the DH supply would be threatened as a result of a lack of brown coal for most of DH plants in the CR. As a result from the lack of fuel and when the solution is postponed, there could be subsequent break up of DH systems, which belongs to the largest in the Europe and have been recently very significantly modernized.

2. Energy Act (458/2000 Coll., amend. 61/2005 Coll.)

“Energy Act” - the full text of act no. 458/2000 Coll., on business conditions and public administration in the energy sectors and on amendment to other laws (the), as amended by act no. 91/2005 Coll.

Section 1, subject of regulation

This Act provides the conditions for business activity, the exercise of public administration, and non-discriminatory regulation in the energy sectors, including the electricity sector, the gas sector and the heat sector, as well as the rights and obligations of individuals and legal entities related thereto, in compliance with the law of the European Communities¹.

The Act covers sectors of electricity, natural gas and heat supply; among defined terms of heat supply sector “Heat energy supply” shall mean supply of the energy of heat or cold for further use by another individual or another legal entity; heat energy supply for further use shall be provided in the public interest.

DH companies have been privatised as business companies, the Act states the business conditions and the DH companies duty is the public service as well.

“End customer” shall mean any individual or legal entity who/which only consumes the heat energy supplied; “Heat energy buyer” shall mean a distributor, an owner or an association of owners of a heat supply facility; a buyer may also be the end customer; heat energy supply directly to the end customer is conditional upon direct consumption for all end customers in centrally heated facilities.

In residential sector DH companies make contracts with the building owner, cooperatives of flats tenants or flats owners (it is obligatory to established such a representation of building users). There are not very significant problems with non-payers on the side of DH companies from the residential sector – the cooperatives solve the possible problems with their competences with their members.

The social situation of DH consumers in residential sector is not bed in general. There are social compensation programs in a case of need.

Sometimes there are disputes among DH suppliers and consumers mostly dealing with the announced DH price for the next period (preliminary calculated). The consumer does not agree with the suggested contract. These cases usually lead via negotiations to an agreement and contract signature. In more difficult cases the consumer ask the State Energy Inspection or the ERO for checking of the situation.

The competences of the State Energy Inspection and the ERO are given in the Energy Act.

Section 31 - Renewable resources (basic definitions)

Section 32 - Combined generation of electricity and heat and generation of electricity from secondary energy sources

(1) In order to increase the efficient use of the combined generation of electricity and heat and reduce the production of greenhouse gases, the heat energy generator must consider pursuant to a special legal regulation the option of introducing the combined generation of electricity and heat.

(2) The generators operating a facility for the combined generation of electricity and heat or a facility for the generation of electricity from secondary energy sources have the right, if they request it and if technical conditions allow it, of preferential provision of electricity transport via the transmission system and distribution systems...

- b) Produced in facilities for the combined generation of electricity and heat in a single process in quantities that may be proved to be associated with the quantity of the heat energy supplied to the centralised heat supply systems or direct supplies to individuals or legal entities for further use and for technological purposes, except the energy generator's own consumption.

A basic condition of the combined generation of electricity and heat is the supply of useful heat for further use. *The conditions and criteria are harmonised with the EU legislation and provisions (CHP reference values, energy savings criterion ... the see the EU Directive implementation)*

Part 3, Heat sector, Section 76 - Heat Energy Generation and Distribution

All the heat suppliers have licence, the amount of deliveries and prices are reported to ERO, ERO publish this information on the websides.

Section 78 – Metering (see the description see the EU Directive implementation)

Section 80, Heat Energy Purchase

(1) The heat energy distribution licence holder having suitable technical facilities to do so shall purchase

a) Heat energy

1. recovered from renewable sources as per Section 31 Subsection 1 and from heat pumps; or
2. recovered from secondary energy sources and

b) Heat energy from combined electricity and heat generation.

(2) This obligation shall not arise:

If the need for heat energy is satisfied as referred to in Subsection 1 above; If this would be conducive to an increase in the total costs of heat energy purchase to be paid by the current customers; or if the heat transfer medium's parameters do not correspond to the parameters in the heat energy distribution facilities at the point of connection. The costs incurred in the heat energy source connection as per Subsection 1 shall be paid by the owner of such a source.

The above mentioned provision along the opinion of ADH CR members solves the possible interest as it is discussed like "TPA". We believe that this provision is simple and sufficient and TPA should not be more discussed.

The mentioned support to CHP production due to the interest in increasing energy efficiency is not accompanied by more promotion of the use of DH. Disconnection from the DH is not prohibited and it is not solve in any provisions. Customer should ask the regionally authorised Build office. There should be solved the question of the disconnection and what kind of heating will be further used. In most cases the office should not permit construction of “a new emissions/pollution producer” in accordance with the Regional Conception of the Air Protection, in some large cities also with regard to the Territorial Energy Conception Plans if it include also the binding Territorial Development Plan. Unfortunately in the most cities especially the letter documents are missing and there is nearly no support to the DH development or protection of disconnection. (Even the “upper level” document the State Energy Policy has been several years doubted, no wonder when the energy concepts are missing at the level of cities.)

The “Build offices” make decision about disconnection moreless on their opinion. When a customer wants to be disconnected, where exist a good practice at the municipality offices, they inform the applicant, that it is necessary to deal with the DH company. DH supplier explain for the applicant, that it is necessary also after the disconnection of DH to share the costs of common area of the building (30 %) and to cover (once and for all) his costs share of connection to DH, that would not be used due to his disconnection. In the Slovak Republic there is a Decree on the conditions of disconnection, including calculations of the payments. The ADHCR members do not want to publish such a provision, that could be like a guideline for such cases. The described process with a good practice at the municipality offices and cooperation/communication on the side of DH companies is considered as a better processing. In many cases is the applicant disappointed by the payments and rethink his plans. Some disconnections have recently happened in the cases of flat cooperations. The costs needed for house boiler and also the maintenance etc. is usually not calculated in the final heat price and natural gas suppliers together with involved boiler producers and project designers persuade the cooperatives about the advantages of heating independent DH supplier.

The Energy Act (in § 78) requests metering installation of the hot water delivered amount for the purpose of costs allocation (costs on thermal energy for its preparation and distribution to individual consumer points). Nevertheless this is not required by the EU legislation. The imposed duty with the involved costs does not solve the complex of problems in metering and billing of warm water, the allocation along the flat water meters inside the buildings with more owners will still continue. Available meters are expensive, maintenance intensive, there are problems with accuracy attests. For heat suppliers the installation of requested meters represents unnecessary financial burdens. To meet the obligation would result in investments costs in total amount 2 – 3 billions CZK in the CR, at each larger DH company about 3 - 250 mio CZK. And this will have an impact on warm water price. The metering operation will cause also a higher consumption of electricity and thermal energy and this counter productive to the Energy management Act (406/2000 Coll.). The result will be warm water price increase and lowering the competitiveness and efficiency of DH.

Other problem dealing with the Energy Act – the Act fails in any interlinks of emergency situations among individual sectors (electro, gas, heat) and their Regulations in this field.

The text of the Energy Act in force fails definitions of DH (“Centralized heat supply”), however some juridical provisions refer to this term:

The Act on Air protection – (180/2007 amend. of 86/2002), § 3: for legal or physical persons it is obligatory, if it is technically possible and economically acceptable, at new buildings or changes of existing ones to use centralised heat sources;

The Act on Energy management (406/2000 Coll. Resp. 61/2008 Coll.)– § 6a: The Energy performance of building document shall include an assessment of the technical, environmental, and financial feasibility of alternative heating systems (incl. DH).

- (Energy Act – mentions “centralised heat supply” in introduction of emergency situations in heat supply and in centralised heat supply systems (DH).

For these reasons the term “centralised heat supply systems” resp. DH should be properly defined including associating terms (DH plants, distribution installations, heat extraction equipment, incl. limitation of a clear border amount these parts of DH system).

In the prepared amendment of the Energy Act will be necessary to solve also other partial fields of problems (existing En. Act does not solve shifting of connection pipelines; access to the heat networks for connection of reserve sources; networks registration in the land registry etc.).

3. The amendment of Act 180/2005 Coll. on RES

At present time a preparation of an amendment is under processing of the Act 180/2005 Coll. on the support for electricity production from RES. The amendment should also cover the thermal energy support. With a suggested principle of the heat production support the ADH CR members cannot agree and with the suggested form of support do not agree any of DH companies producing from fossil fuels. It is obvious, that from the Directive resulted an obligation to support heat production from RES, but it is necessary to enforce such a support system, that would not be financed only by DH companies and in a final result the consumers connected to DH systems. The ADH CR refuse the proposal to established a fund, to that only the part of consumers using heat from non-renewable contributes with payments. This fund should not serve to the enlargement of the large and rather complicated system of finance re-allocation in the CR. There are the main principles of the ADH CR statement to the proposal of the RES heat support under the Act on RES amendment:

- The ADH CR members refuse the proposed principle of support, to which only the licensed (authorised) heat producers would financially contribute.
- We consider as the acceptable solution and we suggest to ensure the contribution to the fund directly from the all suppliers of all fossil (non-renewable) fuels, by a separate levy or by an increase of ecology tax levels of solid fuels and natural gas. By this way all the consumers of these fuels would contribute to the funds on a fair base, including companies and households.
- From the collected finance of the fund would be paid the support/ contribution for the sold GJ of thermal energy.

- Investments should be supported from the Operation Program of the Environment, from the financial sources of the program the “Green Light to Savings”, resp. from the finance obtained by the sell of emissions allowances.
- Biomass should be preferentially aimed to the use of CHP and other technologies meeting high efficiency criteria.

4. The proposal of Climate Protection Policy in CR (CPP)

In the CPP proposal there are defined very ambitious targets in the increase of heat and electricity production from biomass and biogas, which however are not based on an analyses of really available amount of biomass. From the study “Analyses of the market situation of wood biomass in relation to the newly constructed plants in heat supply and pulp industry” results that already started projects, which finalisation is expected in the years 2010 and 2011, these will spent all the available wood chips, that it is possible to use in this brand. If other already planed projects are realised, there is a thread of a lack of biomass on the market.

CPP in the suggested version absolutely ignored the really available potential of CO₂ emissions savings resulted from the possible increase of CHP production from fossil fuels. The ignorance of the CO₂ savings potential reachable due to the higher use of CHP leads to an unreasonable support of many other cases of measures non-comparably more cost intensive for the whole society.

The Analyses of the wood biomass potential covered all the existing most important plants in DH and industry in the CR. The detailed analyses of the situation in construction, reconstruction or technology changes in the plants showed that there are in the CR 13 important projects under processing. Their annual consumption of biomass is over 630 thousand t/a. The annual available amount of wood biomass at the level of 650 – 660 000 t/a will be therefore quickly spent. There are plans for minimal 24 other important plants, which total annual consumption needs further 2 100 000 t/a.

There is obvious that in a very short time of few years the situation will be significantly changed and the demand of biomass will dramatically overcome the offer. It will have impacts on the wood chips prices and very probably the price will enormous increase. There have already appeared the first signals of this development.

The result of the “price war” will be increased prices of inputs to the DH systems and these will not enable to produce hat for a competitive price. It could subsequently lead to massive disconnections from the DH systems and to their breakup. The result of such understanding of

promotion to the higher production share from RES could be in fact decentralisation and breakup of some DH systems.

5. The amendment of the Act on Air Protection

The expected change of the previous Act 86/2002 Coll., on Air protection should make the legislative provisions more simple, ensure lucidity and especially transfer EU provisions. In spite of that the EU legislation is the harmonising directive, in the EU document elements of prevention exceed the repressive provisions. The proposal of the new Czech act is not only absolutely without any preventive and motivating measures, it is conversely absolutely unmotivating with many repressive provisions out of possibilities of operators, provisions unsystematic, contradicting to the related documents of CR legislation. There are unnecessary more strict limits not resulting from EU provisions, these are discriminative for a selected group of plants (especially for large plants) with the aim to establish a directive control by the Ministry of the Environment and to gain financial sources. These financial sources are not given back to the field of air protection.

- The ADH CR members do not agree with the role of the MEnvir to set the emission caps to individual stationary plants. If the regional (district) offices set the conditions for plants operation in the integrated permission, these should also decide on the level of emissions caps based on the knowledge of locally appropriate conditions.
- We do not agree, that the decision of how long the plant will be operated makes the regional office. There is a thread of the utilisation of operators investments, when it is possible after a subsequent assessment of the regional office to set further more restrictive conditions of operation or compensation provisions. By this approach the operator would be disadvantaged. Financial burdening of operators is so heavy in the proposed amendment, that the certainty in the context with unstable conditions of plant operation is nearly not possible and more it is in a conflict with operators investments protection. And further there could be threatened the heat supply for inhabitants, when the regional office get to the opinion not to issue the permission for the energy plant operation.
- The increase of pollution levies is disproportionately high during the years (5 - 10x) and it would significantly burden the DH supply. The DH supply would be in the final impact further disadvantaged again the local heat production, which has in general worse conditions for emissions dispersion, but these local sources in many cases will not pay any levies of pollution. If the emissions limits will be set with the use of BAT parameters, it is hard to expect, that operators will be able to reach significantly better values. It is not possible to speak about a mitigation role of the levies in the cases of stationary energy plants (it is technically not possible to decrease the emissions production). The levies become in this case only an additional absolutely non possible to be influenced tax, that economically burden companies, which have already put huge investments to meet very strict emissions limits.
- The Act on Air protection shall contain a clear support for DH as the way of heat supply with a proved positive effect on the environment.

6. National allocation plan for the period after the years 2012

As the fundamental question we consider a necessity to get the possibility of temporary free allowances allocation for the needs of DH sector in a maximal possible extend. To ensure the heat supply it is requested by the Energy Act (458/2000 Coll.) and needed purchase of allowances will be negatively reflected in heat price. It would encourage disconnection of consumers and switch to local heating with impacts on the environment. The aim is therefore to reach an acceptable system

of allowances allocations for the plants after the year 2012. The European committee promotes the benchmark, that is for the CR inappropriate. If there will not be the possibility to get the free allowances for DH there is a thread, that there will appear a number of plants under 20 MW, disconnection of DH systems and breakup especially of large DH systems. Other comments to the act provision are as follows:

- §10a, the subarticle 4: the deadline for applications submission is rather short, even with the discussed postponed deadline on June 30, 2010. And any more detailed criteria are not known, by which the choice of applied projects at the European Committee will be made. Due to the reason, that the criteria are not clearly stated for the choice of applied projects, it could happen, that the project, suggested by the producer, will not be chosen or it will get a lower evaluation than other projects. In accordance with the proposed change, the free allowances would get another project – better evaluated – or the allowances would not be used at all. For that reason we suggest, that in such a case the producer will get the possibility to make changes on the project in order to meet the criteria or they should get the possibility to submit another project, that would meet the criteria. If the producer does not submit the project till the MEnvir stated term, the process would be along the suggested change.

- §18, subarticle 5: to give back the amount of finance increased by the price index of industrial producers means a sanction for the producers, which will not be able to realize the project. There it is necessary to take into account the reality, that the producers commit themselves for a long time and the project will be very probably taken into reality at quite different conditions than they estimated in the time of application. An administrative tort could along the proposed change also arise by the way, that the project in not realised from other reasons, than the will of aplicat (a high price of the project, unsuccessful tender, process of apporoval in build administration, EIA or other administrative procedures by the build preparation). It could happen that the demand of the investments and the price index of industrial producers will be much higher than the time value of money is, because the high demand increases the prices (it has already happen). The risk resulting from possible sanctions could be high and could influence even the decision about investments, which will be submitted. We suggest, that to give money back is increased only about the time value of money (for example index PRIBOR or other one, which represents only the time value of money).

- §10c: due to the uncertainty in codes of industrial brands, we suggest to add to the §10c, (4) as follows: "Electricity producers can get free allowances for district heating and cooling produced in high efficient CHP in accordance with the same regulations as they are in covered brands under (1) up to (3) and in the case, that for such heat produced in installations in other brands would be free allowances allocated (the original proposed text deals only with theat delivery to the brands of carbon leakage).

We consider as a problem, that the CHP plants will have a lowered allocation for electricity, due to the reason, that electricity export of the CEZ company, that is not calculated into the base of 2005-2007, is equally spread among all CHP plants (free allocation deals only with the gross indigenous consumption of the member state).

7. Ecology tax reform

In the frame of further phase ecology tax reform it is necessary to keep at least the existing extend of tax exemption (within the extend of the amendment of the 1st phase of the reform). The question should be solved of natural gas taxation for all installations. In the Czech implementation of EU Directive there have been used only a minimum of tax exemptions possibilities in taxation of CHP production. The possibility of tax exemption for energy products consumption in heat production covered by the regime of trading licences has not been implemented (at the installations covered by the NAP system).

8. The EU directive on industrial emissions

The proposal of the directive suggests new limiting values of emissions for polluting substances and for very large installations and suggests the terms of their realisation (2016) - SO₂, NO_x. The suggested values cannot be reached by the Czech installations. In the case, that the proposal will be accepted, there will be a significant increase of investment and operation costs at affected operators. Large investments to ecology measures on the installations from the recent years will be aborted (the requests of the National program of emissions reduction from the existing very large combustion installations are significantly slighter than the requests of the proposal).

9. Regulation

Regulation of heat prices. Heat prices are regulated since the year 1990, when the regulation of energy prices has been introduced. Since the introduction the heat prices are under so called “principle of materially regulated prices”. It means that the heat price of thermal energy in a regulated year can only reflect economically justifiable variable and fixed costs, adequate profit and value added tax (hereinafter “VAT”). Prices resulted mostly from the fuel prices and from this view the heat producer cannot the final heat price influenced. Further enlargement of the extent of regulation of DH companies activities cannot lead to decrease of the heat prices and in the final result the stricter regulation can mean a depression of DH companies activities and breakup of the DH systems with very negative impacts on consumers. The existing implemented principle of materially regulated heat prices is appropriate one, it represents a system in heat price construction and ensure transparency of its setting. It is eligible to have long term stable principles of regulation, then to change them in each year. From an outlook, should be discussed the question of regulation as a un-systematic measure.

The support for CHP. The high efficient CHP is generally considered as a clean technology significantly friendly to the environment and for that reason there is by the state declared support in the existing and also in the new proposed State Energy Policy. One of the supporting forms is also a contribution to the electricity price from CHP. This contribution is in each year stated by the Price Decision issued by ERO. Contrary to the declared support, the value of this contribution for the plants with the installed load under 1 MW and from 1 up to 5 MW has been decreased during the recent years. In each time it was with a reference to the increasing electricity purchase prices. For the plants over 5 MW the value of the contribution is significantly lower and since the year 2005 has been not changed. We believe that by the state declared support to the CHP electricity production should by an adequate way rewarded the resulted effects of this production for the whole society. The total CHP support is in comparison to the support for electricity production from RES in a long term significantly lower, however the effect to reach the state targets in the

field of the environment protection, employment and energy independency is at least a comparable one. In no case the level of contribution is a sufficiently motivating factor for new energy plants installations with the use of CHP production, above all the large installations. The ADH CR members request the revaluation of the contributions for CHP production stated in ERO Price Decision no. 4/2009 for the year 2010. The stated level is considered as insufficient with regard to the importance of CHP production.

Other measures with influence on DH

1. The program “Green Light to Savings”

There is missing in the program the support and grants for the switch off the local/individual heating on solid fuels to DH similarly as it is considered the support by switch to biomass incineration or to heat pumps. For DH it could be for example a contribution on house station or connecting pipelines. There is missing the possibility of support for heat transmission and distribution network reconstruction, for the replacement of steam by hot water network. This would bring reduction of heat losses in networks and stabilisation /eventually decrease of heat prices.

Another problems appears with the support to solar thermal panels. In the frame of the program “Green Light for Savings” changed conditions and by the enlargement of the extent by covering the block of buildings a thread appeared for the heat and warm water supply sources. On the new conditions the support is provided for installations of solar thermal panels. Unfortunately it deals in practice mostly with the subjects supplied with DH also based on CHP or RES. It means that the support makes worse the situation of these technologies and could cause disconnection from the DH supply. Paradoxically, the support to solar panels damages the support devoted aslo from the Czech or EU funds for biomass useage. Such a system of support reduces the energy efficiency of installations with ecology heat production, it reduces the electricity production in CHP. This will be subsequently replaced by less ecological production in condensing plants.

2. Damages on the forests

In practice there are still applied compensations of damages on forests on the account of energy companies. Why when all the energy companies meet with a high leeway all the legislative requests of emissions limits?

