

Critical Analysis of Proposals for an Amendment to the **Supported Energy Sources Act** (The Ministry of Trade and Industry)

Chamber of Renewable Energy Sources 17 April 2013

The Ministry of Industry and Trade (MPO) is preparing some amendments to Supported Energy Sources Act No. 165/2012 Coll. Those who had expected that the new supported energy sources act combined with the National Action Plan of Renewable Energy Sources approved by the Government would bring stability of the business environment were wrong. The development of RES technologies within the National Action Plan of Renewable Energy Sources by 2020 was questioned by the Government itself. In the proposal of the State Energy Policy the Government planned to stop the operational support to the renewable energy sources by 2015. The current proposal for an amendment to the Act stops the operational support to all renewable energy sources put into operation as early as of 1 January 2014.

The aim of the amendment to the Act is the effort to stop the continuing growth of the energy prices. Such aim can only be agreed with. However, in conflict with this declared aim, the The Ministry of Industry and Trade proposes to subsidise combined production of energy and heat on a basis of coal, waste incineration and moreover, introduce an operational support of nuclear energy in form of the so-called capacity payments.

The proposal for an amendment to the Act retroactively shortens the support payment time to 10 years. However, both Act No. 165/2012 Coll. and the previous legal regulations guarantee a claim of the operator for support for the energy generating plant life, i.e. 30 years for small hydroelectric power stations and 20 years for other RES. There is a new obligation of the RES operator proposed – to submit economic data on return on investment in ten years after putting the technology into operation. If the operator fails to document that investment has not been repaid yet, it will lose the operational support guaranteed to operators for the life of the technology under the existing Act. Retroactive amendments to the Act will lead to hundreds or thousands of actions and lawsuits against the State. The absolute majority of the credits for RES have been provided with maturity of more than 10 years. As a result, banks – if the amendment is adopted - will have to transfer almost the entire volume of credits for RES to classified credits that will need to be restructured. It is obvious that such changes will lead to insolvency of a number of RES operators. The submitter of the amendment to the Act should explain why the amendment supports and protects artificially overpriced anonymous photovoltaic power plants put into operation in 2009 and 2010 that are protected against solar payments as a result.

The proposal cannot be understood otherwise than as an intentional damage of investment in the already installed plants for the production of energy from renewable energy sources. The proposal itself already has negative impacts on the perception of the Czech Republic as an attractive economic location. The proposal not only discourages foreign investors from entering the Czech Republic but will also lead to a massive departure of investors from the country. Although the amendment is not yet legally binding, it leads to a massive uncertainty of investors, financing banks and cooperating partners. In addition, the amendment puts further existence of jobs created in the field of RES in the Czech Republic in recent years at risk. Its adoption would have

negative consequences for the regional creation of values as contracts for the construction of facilities using RES, their commissioning and operation are awarded to local businesses and partners.

If the draft amendments to the Act are adopted:

- All renewable sources already operated will be completely destabilised,
- Anonymous operators of large photovoltaic power plants from 2009 and 2010 receiving inadequately high support will be protected,
- Development of all new RES being prepared by small and medium-sized enterprises will immediately be stopped,
- Departure of foreign investors from the Czech Republic, not only in the sector of RES, will be experienced,
- Support of nuclear power plants will be introduced,
- Expenditures of the state budget or the price of energy will be increased.

What specific changes the Ministry of Industry and Trade is proposing:

- 1. Stop of the operational support of new RES from 2014,
- 2. Continuing support of high-efficiency CHP from fossil fuels,
- 3. Continuing support of secondary sources, waste to incinerators, in particular,
- 4. Stop of the support for decentralised production,
- 5. Stop of the support after 10 years (for continued support, the operator must demonstrate more than a decade payback period)
- 6. Further application of the solar tax is not proposed
- 7. Relief to energy intensive industries by reducing the contribution for SES ⇒ differentiation of the amount of the contribution for SES in the price of energy for the end consumer based on the volume of its consumption
- 8. Disclosure of ownership structures of SES operators receiving support
- 9. Fixation of the contribution for SES in the price of energy for the end consumer
- 10. Introduction of operational support of production of energy from nucleus

Statement to the points above:

To point 1 – Stop of the operational support of new RES from 2014

The Chamber of RES absolutely disagrees with the proposal.

The Ministry of Industry and Trade is proposing to stop the operational support of all RES commissioned from 1 January 2014. Lately, there have been several changes in the sector of RES the State is planning to make. First, in 2010 the Government submitted a National Action Plan for RES (NAP) that sets maximum limits of the installed capacity of individual RES. In 2012, a new act on supported energy sources No. 165/2012 Coll. was adopted. The new act is changing the conditions, replacing the existing act on the support of RES and introducing the NAP as a

regulation in conflict with Ordinance No. 2009/28/EC. Subsequently, in 2012, the Government submitted a proposal of an updated State Energy Concept (now in the process of assessing by SEA), although the proposal makes provisions for the development of RES from 2015 – again a change to the conditions. In 2012, the Government also approved an updated NAP by which it again changes the conditions, reduces the maximum installed capacity for sources that have not yet drawn the previous limits, i.e. Small Hydroelectric Power Plants (SHPP) and wind power plants (WPP). And now, in 2013, the Ministry is submitting a proposal not only changing but directly cancelling the support for new sources and introducing significant retroactive interventions in the rights of operators of the existing sources!

The Government does not have any consideration for the failed investment in the projects being prepared. It is SHPP and WPP where the project preparation and implementation often take even 10 years.

In addition, the State has the option to preferably use the cheapest RES when WPP represent in 2013 a burden of 1 haler/kWh in the price of energy for the end consumer and SHPP 2 halers/kWh (32 halers/kWh for PV power plants (PVPP), for comparison). The existing tool for regulation is sufficient.

Our recommendation: Support of RES in several directions. Permit processes to be made adequately easier for all RES. For individual RES:

- SHPP Keeping the support of new sources within the limits specified in the NAP
- WPP Keeping the support of new sources within the limits specified in the NAP
- BIOGas Keeping the support of new sources within the limits specified in the NAP, with restriction only for the construction of biogas stations for waste from the municipal sector and agriculture. The installed capacity of biogas stations to be limited to 0.5 MW and a maximum heat utilisation as a condition to be given
- BIOM Keeping the operational support of heat under Act No. 165/2012 Coll.
- PVPP Without operational support of energy according to the NAP; "net-metering" to be permitted for "self consumers"
- GEOT Keeping the support of new sources within the limits specified in the NAP and keeping the operational support of heat under Act No. 165/2012 Coll.



Total costs of energy support according to the proposal of the Chamber of RES (new RES) estimate:

	A year [CZJ/a year]	Cumulatively [CZK]
SHPP	CZK 300,000,000 ¹	CZK 7,000,000,000 ²
WPP	CZK 700,000,000 ¹	CZK 11,500,000,000 ³
BIOGas	CZK 600,000,000 ¹	CZK 10,000,000,000 ³
GEOT	CZK 80,000,000 ¹	CZK 1,300,000,000 ³
Total	CZK 1,700,000,000 ¹	CZK 29,800,000,000 ⁴

Table No. 1: Estimate of total costs of the support of energy production from new (future) OZE as proposed

To points 2 and 3 – Continuing support for high-efficiency CHP from fossil fuels, continuing support of waste incineration

The Chamber of RES does not agree with the proposal.

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The Ministry is proposing a continued support of the production of energy from CHP, though it is clear that the support of fossil fuels does not result from obligations towards the EU. In the EU, CHP is usually supported only through small sources with a capacity up to app. 1 MW, for RES, in particular. In the Czech Republic, at the same time, three quarters of CHP are based on fossil fuels. This proposal will not lead to the stabilisation of the energy prices, rather the opposite. Prices of energy will rise as a result of the continuing subsidies of incineration of fossil fuels (coal and natural gas in form of CHP), mine gas and waste designated to incinerators. According to ERÚ, the costs of CHP and secondary sources will grow by 107%, from CZK 0.96 billion in 2012 to CZK 1.82 billion in 2013, which represents a burden of 3.2 halers/kWh in the price of energy for the end consumer, i.e. comparable with the costs of support of all SWPP and WPP combined.

It is striking that the Ministry of Trade and Industry is proposing to stop the support to all RES while at the same time it is promoting a continued support to coal incinerators, creating a burden not only by the additional costs of support but also by its external costs. In the proposal of the Ministry, these external costs are completely neglected, i.e. costs indirectly connected with preparation, operation and liquidation of coal-burning plants (recovery of coal fields, costs of opening coal sources/breaking the mining limits, environment recovery costs as a result of an environmental burden due to air emissions, etc.). These costs are not met by an operator of the given power plant but are met from public funds. This disadvantages other sources and the system continues to provide a hidden support to fossil sources.

¹ In a year with the highest additional costs for the given type of RES over the support period

² For a period of support of 30 years

³ For a period of support of 20 years

⁴ For a period of support (30 years for MVE, 20 years for other RES)

<u>Total costs of support of CHP + SS – estimate:</u>

	A year [CZJ/a year]	Cumulatively [CZK]
CHP + SS	CZK 1,800,000,000	CZK 47,400,000,000 ⁵

Table No. 2: Estimate of the total costs of support of energy production with CHP+ SS, provided the support amount from 2013 is not increased

Our proposal: stopping the support of CHP and SS.

To point 4 – Stopping the support for decentralised production

The Chamber of RES does not agree with the proposal.

The Ministry is proposing to stop the support for the so-called decentralised production of energy. It is a support to decentralised energy sources (by connecting to a system other than the electric power transmission) producing energy close to the point of consumption and thus reducing the costs of the electric power transmission system operator and operator of distribution systems both of the development and maintenance of the grid (transmission system and higher voltage levels of regional distribution systems) and of losses in the power transmission and transformation. The support of decentralised sources gives sense as it promotes the modern direction of decentralised energetics. The amount of support for producers for the energy produced is rather symbolic: 1.2 halers/kWh for a producer connected to a very high voltage level and 1.4 halers/kWh for a producer connected to a low voltage level.

The proposal for stopping support of a decentralised production is another gift of the Ministry of Trade and Industry to distributors of energy at the expense of small decentralised energy producers.

Our proposal: Keeping the support of a decentralised production. Since the utilisation of energy from decentralised sources saves energy distribution costs, we require that this support be paid for by distribution companies. Or, rather, to determine how part of the saving from the energy distribution from decentralised sources is transferred by distributors to producers.

To point 5 and 6 — Stopping the support after 10 years (for continued support the operator must demonstrate more than a decade payback period, continued application of the solar tax is not proposed)

The Chamber of RES absolutely disagrees with the proposal.

There is a threat to all businessmen in the RES sector. Retroactive changes to the Act will undoubtedly lead to lawsuits against the State. The proposed change is undoubtedly more significant compared to the solar payment, see appendix: "Assessing the constitutionality of the proposed provisions of section 7 subsection 5 of Act No. 165/2012 Coll. in light of the Constitutional Court judgment from 15 May 2012, Pl. ÚS 17/11"

⁵ By 2039

Legal framework and the used model of setting of purchase prices

Legislation establishes an entitlement to support (in the specified amount in most cases) for the existing RES over the expected life time (i.e. 20 years for WPP, PVP, BIOM, BIOGas and 30 years for SHPP). The purpose is clear: the possibility of setting a lower purchase price for the given types of RES. Since the beginning, Act No. 180/2005 Coll. has been designed so as not to limit the time of support provision to fifteen years. In section 6 the Act only defines the minimum criteria for setting purchase prices for the period of the first fifteen years from plant commissioning. The fact the Act theoretically enables to reduce the support after fifteen years or envisages a possibility of a significant increase in operating costs does not mean that the energy producer does not have a right after those fifteen years to receive support of the energy produced from those sources. The extinction of this right is not regulated by the Act and cannot be deduced in any manner from Act No. 180/2005 Coll.

By contrast, when setting purchase prices the State deliberately chose guaranteeing an entitlement to support (and its amount) over the expected life time of the given type of RES. This procedure also enabled realistic setting of purchase prices at a lower level than it would be set in case of support being provided only for fifteen years.

If, on the contrary, support being provided only for fifteen years is used for setting purchase prices, higher purchase prices would need to be set, which would result in an increase in the total amount of additional costs, i.e. in an increased contribution for RES/SS/CHP and therefore higher prices of energy for the end consumer. The State-used model of setting purchase prices, i.e. guaranteed support for 20 and 30 years for SHPP meant distribution of additional costs in a longer period and a lower contribution in the price for energy consumers.

Act No. 165/2012 Coll. has confirmed the facts given above in transitional provisions.

RES operators facing a risk of bankruptcy

The proposal fundamentally puts parties of credit contracts, based on which most of the existing RES has been funded, at risk. At a number of credit contracts, the debtor can get to a situation when it can be called to prematurely repay the entire credit principal. The creditor, on the other hand, can lose support for the cash flow of the debtor or its ability to repay its obligations even after 10 years of plant operation. The Ministry of Trade and Industry proposal will affect bank credits in an amount of more than CZK 150 billion that will most likely need to be immediately transferred to classified credits. A significant part of repayment schedules often conceived as quasi-annuity is beyond the 10th year of RES operation, in case of PVP, in particular, see the estimate of the Chamber of RES below.



				Amount of	
	Investment 2005-2012 in millions of CZK Involvement of banks in millions of CZK	Involvement of		payments beyond	
				the 10 th year of the	
		repayment			
	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	CZK OT CZK	OI CZK	schedule in millions	
				of CZK	
PV	185,000	70%	129,500	51,800	
BIOGas	36,750	70%	25,725	5,788	
BIOM	4,600	60%	2,670	668	
WPP	10,400	70%	7,280	1,820	
SHPP	6,000	50%	3,000	600	
Total	242,600		168,175	60,676	

Table No. 3: Expert estimate of the total investment in RES since 2005; share of bank credits and repayments beyond the 10th year of the repayment schedule

Factual absurdity of the proposed measure

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Compared to the solar payment, the system of individual demonstration and subsequent checking of the return on investment in projects does not offer any advantage, on the contrary, it brings a number of negative side effects. In particular, the proposed solution is much more complex, both in terms of preparation of the underlying documents and the subsequent check. Considering the necessary individual approach, it significantly increases space for corruption and manipulation. Potential yields from individual checks of return are not certain due to – among other things – the ten-year gap of effect of this provision. The system works on the principle "the worse the better", i.e. it awards projects with high investment or operating costs at the expense of efficient installations. This is problematic for operators of sources other than photovoltaic, the used technologies of which have never experienced any dramatic drop in investment costs (so ERO has never encountered the limitation of 5% as the maximum annual decline in prices when setting their purchase prices). The proposed system fundamentally favours some big photovoltaic investors that performed the installations "in a group", i.e. sister or otherwise affiliated companies and due to the maximisation of the share of external funding (or intentional take-out of unreasonable financial gain in the installation phase) they also maximised the price of the supply. With the proposed solution these entities will not be involved in any solution of the "solar problem". The proposal will motivate operators to an artificial increase of operating costs. A protection against an artificial increase of costs could include a kind of a flat ceiling. However, it would unfairly affect those projects where increased costs were actually experienced, e.g. due to unexpected technical problems.

Real impact of the proposal

Surprisingly, this proposal satisfies anonymous owners of big photovoltaic power plants built in 2009 and 2010 in respect of which it fixates extremely favourable conditions by no longer requiring a share in the solution of the purchase price distortion by additional payment until the end of the plant life while on the other hand providing a guarantee of not imposing the solar tax by the end of the life (2029). This drop in yields in the tax collection will be paid by either the end



energy consumer in the price of energy or the taxpayer in form of increased expenditures from the state budget.

The aim declared by the Ministry to take away the excessive profits resulting from RES will paradoxically protect the excessive profits of PV operators from 2009 and 2010 that manipulated with the investment costs. It is however the PV that represents the biggest amount of additional costs, 66.4% of the total additional costs of RES in 2013. Out of all PVPs, 92% of them were installed in 2009 (20.4%) and 2010 (71.7%).

Additional costs of RES in 2013⁶:

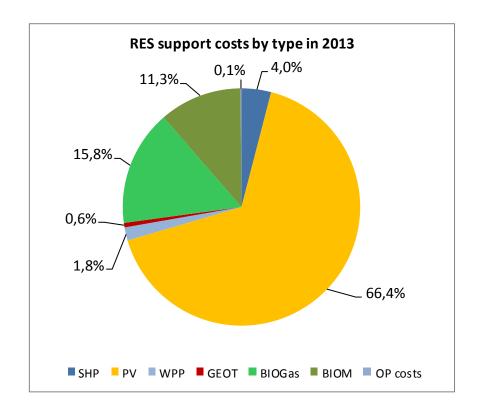
Additional costs of RES by types in 2013								
	SHPP	PV	WPP	GEOT ⁷	BIOGas	BIOM	Costs of OP	Total
[thousands of CZK a year]	1,508,934	24,876,308	672,637	230,004	5,909,592	4,214,185	44,300	37,455,960
	4.0%	66.4%	1.8%	0.6%	15.8%	11.3%	0.1%	100.0%
Costs by individual RES in the price of 1kWh of the end consumption (2013)								
[halers/kWh]	2.0	32.5	0.9	0.3	7.7	5.5	0.1	49.0

Table No. 4: Structure of additional costs of support by individual RES + costs by individual RES in the price of energy for the end consumer

Data source: Government/Energy Regulatory Office (ERO)

⁶ Without CHP, SS, correction factor and reserve

⁷ Additional costs of GEOT are unfounded, at a zero level in 2013



The rectification of the state's failure in the regulation of photovoltaic power plants must be fair

Considering the fact that the additional tax (photovoltaic tax) stipulated by the law for installations put into operation in 2009 and 2010 will be completed as of 31.12.2013, it is up to the government and the legislators to decide whether or not to continue with the solar tax. This decision should be based on calculation of the economy of the sources listed pursuant to the model used by the state to set purchase prices.

The question is: what purchase price would the Energy Regulatory Office set for photovoltaic power plants put into operation in 2010 if it were not restricted by the 5% clause in the law, i.e. that it does not have the power to reduce purchase prices by more than 5% on a year-on-year basis?

Below is a theoretical calculation of the purchase price for PVP put into operation in 2010 pursuant to the parameters stipulated in Decree No. 475/2005 Coll. as amended by Decree No. 409/2009 Coll., which the Energy Regulatory Office would set if it were not restricted by the provisions of § 6 Paragraph 4) of Act No. 180/2005 Coll., which prevents it from reducing the purchase price by more than 5%.

calculated purchase price [CZK/kWh]	9.37 CZK
purchase price pursuant to CR the ERO No. 5/2009 [CZK/kWh]	12.15 CZK

The differentiated rates for taxes on PV and the expected yield could be as follows:

proposed differentiation of PV tax rates differentiation by year in which put into operation					
Year put into operation	7009				
Installed capacity	up to 300 kW	over 300 kW	over 300 kW		
Tax rate	0.00%	5.00%	10.00%		

Table No. 5: proposed differentiation of PVP tax rates, solar tax

<u>Yield from tax on PVP by 2029 – estimate:</u>

Tax on from PV	2 100 000 000 CZK ⁸	33 600 000 000 CZK ⁹
	per year [CZK/year]	cumulative [CZK]

Table No. 6: Yield from tax on from FVE pursuant to proposed rates

The state's intention to correct the extra costs of supported sources is the right one in this situation, provided that the appropriate tools are used. This is a possible solution to the huge extra costs resulting from the failure in the regulation of photovoltaic power plants by setting a fair solar tax - unlike the proposed retroactive infringement on the rights of RES that are already running. On the one hand it is a suitable reflection of the sharp fall in the prices of PV panels, to which the regulation system was unable to respond in 2009 and 2010, while on the other hand, in contrast to the Ministry of Trade and Industry proposal, it minimises the risk of judicial suits filed against the state. From this it is clear that the difference between the calculated purchase price for 2010 of 9.37 CZK/kWh (assuming that there were no 5% maximum limit for reducing purchase prices) and the actual purchase price of 12.15 CZK/kWh provides an adequate reserve for continuing in the solar tax at the reduced rate of 5% or 10% for the whole of the plants' lifetime. The government should clearly guarantee that it will no longer interfere in the economy of PVP put into operation in 2009 and 2010.

Re. point 7. – facilitating energy-intensive industry by cutting the contribution to SES, differentiation of contribution to SES in price of electricity for end consumer according to volume of consumption \Rightarrow differentiation of contribution to SES in price of electricity for end consumer according to volume of consumption

We consider the proposal to reduce the costs of energy-intensive industry to be acceptable provided that it is compliance with EU law. Note the current legal challenge to the analogous system of industry concessions in the neighbouring Federal Republic of Germany. The EU is calling on Germany to abolish this differentiation as such support is against the law.

⁸ Average annual yield for the state

⁹ Cumulative yield by 2029

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Re. point 8. – disclosure of the shareholding structure of operators SES that receive aid

The RES Chamber agrees to the proposal in principle, but will push for stricter legislation

The measure will be wholly ineffective if it does not reveal the shareholding structure back to when the plant was put into operation, or from when construction work commenced on a particular plant. The proposed wording focuses only on the current anonymous owners, of whom those who do not wish to reveal their identity will simply transfer the ownership of anonymous shares to another person before the law enters into force. If this provisions is not made stricter it will not be possible to reveal the identities of specific people involved in politics, or politicians themselves, who probably unlawfully exploited the situation in 2009-2010 and profited and are perhaps still profiting from the state's intentional failure to regulate FVE purchase prices.

Re. point 9. – fixation of the contribution to SES in the price of electricity for the end consumer

The RES Chamber agrees to the proposal, provided that there will be guaranteed fixation for all consumers, i.e. also for households. We consider it logical that the state, which caused the failure to regulate the development of PVP in 2009-2010 (it delayed a minor amendment which in 2010 could have at least substantially slowed or stopped the rampant development of PVP), is seeking a way of mitigating the impact of this error and of not including a proportion of the extra costs of supporting electricity from PVP in the price of electricity.

Re. point 10. – implementation of operational support for nuclear energy

The RES Chamber is fundamentally opposed to supporting the development of nuclear power plants.

The economy of nuclear power plants has dramatically worsened in the last two years or so. While in July 2011 the Financial Director of ČEZ, Martin Novák, claimed that before work begins to build new reactors ČEZ will have earned so much that it will not need a loan, and ČEZ will generate so much cash between the time when building work starts in 2015-16 and when it is completed in 2020 that those funds will suffice. Eighteen months later, in February 2013, ČEZ was asking for the state to guarantee electricity prices, otherwise it would not sign the contract to expand the power plant. "It is basically impossible to build a nuclear plant just with reference to market prices," said ČEZ Strategic Director Pavel Cyrani in an interview with MfD.

The Ministry proposes following Great Britain's example with the "contract for difference" system, which is de facto identical to the system used to support RES as defined by the law, i.e. guaranteed yield for electricity from nuclear power plants. The EDF, which is to build and operate new nuclear reactors with an installed capacity of 3.2 GW at Hinkley Point in Somerset, required a guaranteed minimum price of 118 €/MWh. While also discussing the terms for the construction of the new nuclear reactors, the British government is trying to push the fixed purchase price down to 76 to 82 €/MWh. The price guaranteed by the government should be provided for the entire lifetime of the nuclear plant, i.e. 40 years. It is necessary to take account of the fact that if the proposed "compensatory payments" are approved (note: very similar to the green bonus system for RES), like in Great Britain it will be examined by the European Commission to check that any price



guarantees provided by the government that are more than double the market price of electricity do not constitute unlawful aid.

The proposal overlooks the costs of externality, i.e. costs indirectly associated with the preparation, operation and liquidation of a nuclear plant (the need to build new distribution networks, costs of increased security, inadequate insurance to cover the costs of potential accidents, the costs of building and running stores of nuclear waste, the costs of mining and recultivating uranium mines, the costs of uranium enrichment and purchasing nuclear fuel abroad, the costs of liquidating and recultivating nuclear plants at the end of their working lives, etc.) These costs are far from covering deductions to the so-called nuclear account, i.e. the essential part is not paid by the plant operator, but is covered largely out of the public budgets. This adversely affects other resources and the system retains hidden support for nuclear power plants.

State support for any energy source is justified if its construction brings significant benefits, such as reducing the environmental burden, increasing energy security, diversification of the energy mix and promoting new and promising forms of technology. Support for the construction of new nuclear reactors in the Czech Republic does not meet these requirements. First of all, the completion of Temelín will increase the Czech power industry's dependence on this source. At present nuclear energy covers approximately 40 % of energy consumption in the Czech Republic; once Temelín has been completed this proportion will rise to approx. 60 % (in Britain the proportion is far lower, perhaps because there is more room for building new reactors), while approximately 40 % would be supplied by Temelín itself. Any failure in this sole source would have a drastic impact on the energy self-sufficiency of the Czech Republic. If we consider that this source is difficult to control and regulate and is dependent on imports of fuel from abroad, it can hardly be described as increasing energy security. Other yields are also questionable, as the environmental friendliness of nuclear sources is extremely controversial and, in economic terms, also poses additional risks (the unknown cost of disposing of nuclear material, the risk of uninsurable extraordinary large-scale incidents).

We assume that there is no secondary benefit that would justify the huge cost of supporting nuclear energy.

Any decision taken by the government nine months before the end of its terms of office would probably result in ČEZ going into insolvency. The firm does not have the funds to invest tens of billions of crowns every year in construction. It will therefore be forced to sell off its assets abroad and later part of its network in the Czech Republic. The RES Chamber poses the question, in all seriousness: is this criminal intent or not?

Total extra costs for the support of nuclear energy (completion of TNPP) – estimate:

	per year [CZK/year]	cumulative [CZK]
core (completion of TNPP)	35 900 000 000 CZK	1 436 500 000 000 CZK

Table No. 7: Estimate of total extra costs for the support of nuclear energy over 40 years



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Conclusion: economic comparison of the Ministry of Trade and Industry proposal and the variant proposed by the RES Chamber

According to the Ministry of Trade and Industry, the declared aim of the amendment to the law on supported energy sources is to stabilise electricity prices for consumers. One measure is to place a "ceiling" on contributions to RES and secondary sources for businesses and households, with the difference compensated for from the state budget. We do not dispute this measure, which is neutral when comparing the the Ministry of Trade and Industry variant with that of the RES Chamber.

The the Ministry of Trade and Industry variant proposes stopping operational support for new RES installations from 2014. The calculation proves that cumulative savings of 29.8 billion CZK will be achieved by 2039 on the extra costs of RES. At the same time, however, the Ministry of Trade and Industry proposes continuing to provide what is essentially increased support for CHP combined heat and power generation (including predominant coal-based generation) and secondary sources. The costs of supporting these non-ecological sources will be 60% higher than the "saved" costs for the rational support of RES. More surprisingly, and with no explanation, the Ministry of Trade and Industry is resigned to a solidarity proportion of operators of photovoltaic power plants put into operation in 2009 and 2010 to resolve the failed regulation of photovoltaics prices. Conservatively setting the solar tax at 5% or 10% for larger installations exceeding 300 kW would provide a cumulative yield of 33.6 billion by 2029. In relation to the possible continuation of the photovoltaic tax, however, we consider it crucial that the government clearly declare that this is the last time it will intervene in PVP economy and that it will guarantee set conditions until the end of the service lifetime of PVP put into operation in 2009 and 2010.

The table below clearly shows that the overall balance of the costs of the amendment to the law on supported energy sources pursuant to the Ministry of Trade and Industry will be 47.4 billion CZK or 1.48 bil. CZK in the minus if guaranteed prices of nuclear energy are assured. However, the balance of costs for the RES Chamber variant is positive, assuming a yield surplus of 5.8 billion CZK.

Note: CHP+SS extra costs calculated until 2039 while not increasing volume from 2013; RES extra costs for 20 (30 for SHPP) years of lifetime/entitlement to aid; yield from solar tax and retroactive changes, calculated from 2029, extra costs on nuclear / completion of TNPP calculated for 40 years of lifetime/entitlement to aid.

Comparison of MTI proposal and variant proposed by RES Chamber:

	MPO variant	OZE Chamber variant
CHP+SS costs (until 2039)	-47 400 000 000 CZK	0 CZK
Costs of new RES (until 2039/ SHPP until 2048)	0 CZK	-29 800 000 000 CZK
Yield from tax on PV _(until 2029)	0 CZK	33 600 000 000 CZK
Yield from retroactive changes (until 2029)	???	0 CZK
TOTAL	-47 400 000 000 CZK	3 800 000 000 CZK
Nuclear _(for 40 years)	-1 436 500 000 000 CZK	0 CZK
TOTAL	-1 483 900 000 000 CZK	3 800 000 000 CZK

Table No. 8: Comparison of costs and yields of MIT and RES Chamber proposals

Besides the economic indefensibility of the the Ministry of Trade and Industry proposal, the proposal will also cast doubt on the stability of the business environment in the Czech Republic, which is unacceptable. Even now it is discouraging domestic and foreign investors, yet retroactive interference with rights granted by the law will result in thousands of lawsuits filed against the state. The proposal will result in uncertainty in the business environment and will discourage domestic and foreign investors. The last of the planned changes will definitively discourage not only the remaining domestic investors, but also all foreign investors, from investing in RES. Word of the state's position will undoubtedly spread beyond the RES sector, thus damaging the Czech Republic's reputation as a suitable destination for foreign investment. Last but not least, the the Ministry of Trade and Industry proposal is a clear attempt – although perhaps unintentional – to bring about the biggest upheaval in the Czech banking sector since the end of the nineties, which is extraordinary in that it comes from the state.

Abbreviations:

MIT - Ministry of Industry and Trade of the Czech Republic

ERO - Energy Regulatory Office

ASES - Act No. 165/2012 Coll. on supported energy sources

SES - supported energy sources

SS - secondary sources

NAP - National Action Plan for Renewable Energy Sources

RES - Renewable energy sources

CHPG - Combined heat and power generation

SHPP - Small hydro power plant

WPP - Wind power plant

BIOG - Biogas plant / power plant

BIOM - Biomass (electricity generation from biomass)

GEOT - Geothermal power plant TNPP - Temelin nuclear power plant

POZE Supported energy sources SEA Strategic impact assesment

PV PhotovoltaicsSS secondary sources

Appendix:

Assessment of the constitutionality of the proposed provisions of § 7 Paragraph 5 of Act No. 165/2012 Coll., in the light of Constitutional Court Ruling No. Pl. ÚS 17/11 of 15.5. 2012

The proposed provisions of § 7 Paragraph 5 of the amendment to Act No. 165/2012 Coll. state: "
Producers of electricity from renewable resources that apply support in the form of purchase prices are obliged to provide the market operator with a calculation of the payback period, in electronic form, by the end of the tenth month of the calendar year, from the time the plant is put into operation... If the actual payback period is shorter than the payback period specified in §12 Paragraph 1 a), the market operator will reduce the amount of time for which support is provided by this difference"

The provisions of § 12 Paragraph 1 a) of the same law to which the amendment refers stipulates: "The Office sets prices so as to achieve a simple fifteen-year payback period." Moreover, § 7 Paragraph 3 of Act No. 165/2012 Coll. guarantees that support will be provided for the lifetime of the plant as determined pursuant to the implementing regulation as effective when the plant is put into operation.

The proposed provisions will have a significant impact on the operators of plants put into operation before the end of 2012 (under Act No. 180/2005 Coll.). From the viewpoint of the Constitutional Court's ruling on the so-called solar tax it is clear that **the proposed provisions must be appraised from the viewpoint of retroactivity**.

In its ruling the Constitutional Court stated that the solar tax constitutes false retroactivity. This is defined as legislation that, to quote,: "modifies future legal consequences (relations) established in the past." The proposed new measure to cut the length of support to years, however, may be viewed as genuine retroactivity since, as the Constitutional Court concluded in Ruling No. Pl. ÚS 33/01 "The new legislation, changing the consequences of legal relations that existed before it came into force, is thus a case of the genuine retroactivity of the legal norm." The proposed measure will essentially result in the length of support being automatically cut to 10 years, while the law guarantees that support will be provided for the entire lifetime of the power plant (20 years, 30 years for SHPP). Otherwise, the Constitutional Court considered retaining support throughout the entire lifetime of the power plant to be essential, even in its review of the constitutionality of the solar tax, in which it stated: "With regard to the same calculations presented by ERO it is clear that the question of the payback period as well as the matter of reasonable profit from doing business on the regulated market, must be extended to over the entire anticipated lifetime of photovoltaic panels."

Genuine retroactivity is permissible in wholly exceptional cases. False retroactivity is generally permissible, but it is still necessary to assure that the infringement on rights and legitimate expectations does not exceed the limits set by the constitution. This was tested by the Constitutional Court when reviewing the solar tax, and it concluded that such retroactivity was permissible. In assessing the starting points on which the Constitutional Court based its conclusions, however, it is clear that the proposed provisions of § 7 Paragraph 5 of Act No. 165/2012 Coll. would not stand up to such a test, even if the measure were classed as falsely retroactive.



Basic starting points of the Constitutional Court:

- 1/ High prices of electricity as the result of development of RES and the specific economic situation the state is in (Art. 43, 65 of the ruling).
- 2/ Sharp fall in the cost of constructing PV (Art. 76 of the ruling).
- **3/** Guaranteed yield for 15 years from the date the plant is put into operation, with a fifteen-year payback period (Art. 68 of the ruling).

From assessment of the proposed § 7 Paragraph 5 of the amendment, it is apparent that these starting points are not met:

Re. 1/ The proposed measures will not immediately contribute any funds to the state budget and can therefore not achieve the plan to reduce the price of electricity. The overwhelming majority of the most costly RES electricity generating plants were put into operation in 2009 and 2010 and the amount of support paid out cannot be reduced for several years. In contrast, the abolishment of the solar tax as of 31.12.2013 will immediately either increase electricity prices or will place dramatic pressure on the Czech state budget. **This assumption, which the Constitutional Court took into account when assessing the solar tax, is not satisfied in this case**.

Re. 2/ Besides solar energy, in recent years there has been no other renewable source which has seen any major drop in the cost of technology and thus a decrease in the expense ratio of projects. Any interference with their assets is not offset by a proportional decrease in the costs of the project and therefore cannot be considered in line with the public interest in lower electricity prices. **This assumption, which the Constitutional Court took into account when assessing the solar tax, is also not satisfied in this case.**

Re. 3/ The proposed provisions of § 7 Paragraph 5 of the amendment to the law directly assume cases in which not only will there be a reduction in yield, but also that the length of time for which support will be paid will be reduced to that of the power plant's service lifetime. In this case the proposed provisions of § 7 Paragraph 5 are in direct contravention of one of the aspects of RES support which the Constitutional Court considers to be of priority importance.

Conclusion

In the proportionality test – i.e. weighing the public interest in the adoption of solar tax legislation against the private interests of PV operators - the Constitutional Court based its ruling on assumptions that cannot be applied if the false retroactivity involved in cutting the length of time for which support is provided is deemed permissible. It certainly cannot be claimed that the legal conclusions of the Constitutional Court on the constitutional conformity of the solar tax may also be applied to the proposed legislation to cut the length of support. In contrast – if we apply the legal conclusions of the Constitutional Court when assessing the proposed § 7 Paragraph 5 of the amendment to Act No. 165/2012 Coll., we come to the conclusion that in the test to determine the proportionality of interference in private rights such interference cannot be considered to be in line with the public interest, as this cannot even be identified if the length of support is cut to 10 years.