# AMCHAM HUNGARY POSITION BRIEF No. XI

## ON THE PUBLISHED NATIONAL ENERGY STRATEGY AND PROPOSED ACTION PLANS

December 2012

**The main recommendations of AmCham:**

- **Transparent system should be developed for financing the cost of energy efficiency projects**
- **Further analysis are needed to determine the power plant mix and to envisage the total burden factor imposed on the national economy**
- **AmCham proposes to introduce a capacity mechanism which could promote implementing modern, high efficiency and flexible power plant projects**
- **The new gas market model should be based on gas-gas competition from various sources of supply, as an ownership-neutral and discrimination-free vehicle**
- **AmCham has the view that a predictable and investment-friendly legal framework should be established**

The American Chamber of Commerce and its members have been continuously monitoring changes in the Hungarian regulatory environment, including also the energy sector.

AmCham's present position paper is focusing on the analysis of certain key issues specified in the 2011 National Energy Strategy and in the related action plans (still under preparation when this position paper is released), and on the implementation of these issues in various laws.

The Chamber has the view that some points of the action plans that support the actual implementation of the published Energy Strategy should be highlighted before they are finalized.

### Preamble

Following the systemic transition the Hungarian Governments have developed three energy strategy documents, and issued them as formal Parliamentary resolutions prescribing specific actions in 1993, 2008 and 2011 respectively. There was a new momentum, when in 2011 the Parliament (hereinafter referred to as: OGY) approved not only the specific actions but the energy strategy document as well in the relevant resolution.

The 1993 OGY Resolution was designed to launch workflows that would result in solutions to the burning problems of the country's energy system within the newly evolving economic management system.

The 2008 OGY Resolution and the energy strategy document submitted to the OGY identified with scientific precision and in details the goals to be achieved by 2020, namely improvement of security of supply, the country's competitiveness, and ensuring sustainability, i.e. to satisfy Hungary's energy needs regarding long term, safe, reasonable and environmentally-friendly aspects, and enhancing competition in the energy market.

**The 2011 National Energy Strategy** (hereinafter referred to as: Energy Strategy) tried to respond to the processes in the EU and the world economy, and the challenges emerging in recent years. It can be regarded in its content **as an organic further development of the 2008** Resolution, nevertheless changed the focus in certain professional issues versus the 2008 document.

### Pillars, priorities, principles

*AmCham Hungary's Energy and Environment Protection Committee, while commenting on energy-related issues, focuses not only on the interest of AmCham member companies, but also of the entire business sector in Hungary and society at large, reflecting the values of sustainability and corporate social responsibility.*

*The Committee already sent a number of recommendations to the Government (National Energy Strategy - Action Plans, sector legislation amendments, preparation of the adaptation of the EU Energy Efficiency Directive, etc.), continuously driving a closer cooperation.*

*AmCham Hungary's Energy and Environment Protection Committee wishes to express special thanks to its members in the field of energy producing, service, technology, mining and related professional services who helped the creation of this Position Paper.*

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***The Energy Strategy appropriately defined the long term pillars***

The Energy Strategy **appropriately defined the long term pillars** (competitiveness, sustainability and security of supply), as it in general properly identified the available tools and methods in order that strategic directions and goals can be fulfilled. It addressed with special care the global, EU, regional and domestic energy trends, the factors influencing these trends, and within that, the various energy resources. Analysis of horizontal issues (regional development, training, employment, environment protection and natural conservation, as well as welfare and social aspects) should be specifically mentioned.

***The need for energy re-structuring can be supported with the idea that improving competitiveness in the economy should be an issue of top priority***

**The Energy Strategy identified four priorities for the energy re-structuring process** – (1) comprehensive energy efficiency actions covering the entire supply and consumption chain; (2) increasing the share of low CO2 intensity power generation; (3) expanding renewable energy generation and enlarging alternative heat generation; (4) increasing traffic methods with low CO2 emission – **that can be supported provided that particular attention is dedicated to improving the competitiveness of the economy when various actions are considered.**

## Energy efficiency, renewable energy

***The greatest energy efficiency potential is in building insulation***

**AmCham agrees** that upgrading energy efficiency should be the no. 1. priority, and within that, **exploiting saving potentials in buildings** and the industrial sector **must be an issue of top priority.** Regarding the forthcoming transposition of the EU Energy Efficiency Directive in Hungary, AmCham points out that it would be reasonable to implement the Directive in those sectors where the maximum benefits from least cost principle will emerge along with the highest energy saving, and **we need to establish a transparent system for financing the project cost.**

***Transparent system should be developed for financing the cost of energy efficiency projects***

We should not waste more time in introducing the system-level application of smart metering, which is on one hand an effective energy efficiency tool, and on the other hand it might facilitate regulating the inter-cooperating energy systems.

**The Chamber also supports applying renewable energy and combined heat & power generation that can contribute de-carbonization targets both in heat and electricity generation sectors.**

***Renewable energy resources should be analyzed by their cost efficiency***

***A consistent project framework scheme with long term predictability should be developed for renewable, as soon as possible.***

**AmCham agrees** that we **need to increase the share of renewables in the energy mix** in harmony with the EU de-carbonization roadmap – according to the country's economic output and the reducing rate of unit cost of renewable technologies – primarily focusing on the need to prefer, as far as possible, the schedulable technologies. It also supports the principle that **renewable energy sources should be analyzed based on their cost efficiency,** and that the high amount corresponding subsidies should be repealed in order to enhance competition among various technologies. At the same time it calls the attention that amount, efficiency and catalyst role of state subsidies required for achieving the goals set out for renewable energy can greatly depend on the conditions for involving private capital into project implementation. To this effect, AmCham **proposes elaborating a subsidy and operation scheme for the projects that can best fit to the national circumstances and offer consistent and long term reliability for utilizing renewable energy, the sooner the better.** (The Chamber also points out that when the power generation mix is developed it should be considered that reducing energy intensity and improving energy efficiency can replace or save significant power generation capacity developments, and thus huge cost.)

## Power sector

**AmCham supports** the Government's concept to prepare a power plant development action plan related to the Energy Strategy. It also agrees that long term goals defined in the Energy Strategy (de-carbonization) and – inter alia – the short and medium term actions to be elaborated in the power plant development action plan should be

harmonized, as long term actions can be realistically implemented only if decisions required for implementation can be presented already in the short term actions. **AmCham agrees with the Government** that the state can, with the help of indicators properly selected in the action plan, also as points of measurement, adopt solid and transparent decisions for the predictable modification of the relevant regulatory environment.

**AmCham, however, wishes to point out** that the current list of key conditions used for analyzing the capacity development routes identified in the action plan concept (so far published) might need to be supplemented and the current key conditions modified for the following reasons:

***The list of key conditions prepared in the analysis of capacity development paths should be supplemented with other aspects***

– The current list is primarily focusing on fuel/emission, and it does not address professional considerations in the electricity sector like key conditions for stable and flexible operation of the power system, analysis of cross effects between various sub-markets, etc.;
– The application of the least cost principle as pre-condition is a goal that can be in general supported, but this principle cannot be interpreted in itself for power plant projects based on long term investors decisions and on the electricity wholesale market. Thus the range of interpretation of the least cost principle would be reasonably reduced to market-based return of cost of capital for projects and we should analyze whether we can follow the capacity development path that implements the strategic scenario of the given national energy strategy, i.e. whether market-based projects can be expected in the future;
– The list of indicators used as points of measurement fails addressing major sector-specific considerations in electricity, like e.g. the risk related to missing system balancing/reserve market capacity, or the threat imposed by such inefficiencies;

***Sector-specific considerations in electricity should receive a greater role***

– As it follows, both the lists of key conditions and indicators need to be supplemented with an electricity product approach, which can fundamentally influence the developments of power plant capacities;
– One of the identified ultimate objectives is de-carbonization, where the implementation action plan offers promising opportunities, but it is also based on the currently immature CCS technology. Though the date for introducing ordinary operations of CCS storage facilities is presently questionable, we propose to present the arising uncertainties in the final action plan, taking also into account that the use of CCS technology (mature for industrial applications), appropriate industrial know-how and capital may contribute to the exploitation of the domestic coal reserves in a long term sustainable manner.

**AmCham indicates** that the draft of the power plant development action plan:

***The action plan is not focusing on the balancing of the electricity system that can impose risks on short term***

– **is rather focusing on medium and long term rather than on problems of the near future (2-5 years) that requires immediate solutions** (e.g.: lack of capacities that can be applied for balancing the Hungarian electricity system, or manage the by cross-border physical flows);
– the basic concept of the action plan for the near future is that available capacities are sufficient to meet demands, but AmCham is convinced that the document does not take into account the shutdown of AES Tisza II. Power Plant and the de-commissioning of Dunamenti Power Plant F-blocks (circ. – 2000 MW), and this would significantly reduce the installed capacity that can be used for balancing the Hungarian electricity system.

## Power plant mix

**AmCham agrees** that a strategy-type document would be needed to trace a power plant capacity structure and power plant mix which can be used as an ideal solution based on available data and foreseeable expectations. The concept of the power plant action plan determines the framework when the implementation of a „nuclear-coal-green" scenario is decided. Bearing in mind that the economic study of the energy strategy analyzed the various scenarios only from a regional market price aspect, **AmCham proposes,** in order to envisage the total burden factor imposed on the national

***Further analysis are needed to determine the power plant mix and to envisage the total burden factor imposed on the national economy***

***Nuclear energy has a planned 54 % share in domestic generation but this is too high and might cause balancing problems***

***Unless the relevant guarantees are secured, burdens of Hungarian end-consumers may increase***

***Need to analyze changes in supply and demand of the regional market***

***Focus should be dedicated on the development of natural gas-firing power plants capacities that can be used for balancing purposes***

economy, **to conduct studies that also demonstrate that certain technologies can be implemented on market basis and with market financing or only with some kind of state subsidy** (supported price, contract for difference, etc.).

**The Chamber agrees** that with a view to meet baseload demand we should retain the role of the nuclear power plant in the power generation mix, while there is still a need for the said studies or analysis. Based on the lifetime extension of Paks Nuclear Power Plant, we should set the timeline for replacing the existing blocks (and define their capacity) **so that the overlap between the construction of the new block(s) and parallel operation of the old blocks can be minimized, and operation cost can be optimized on long term, and the balancing risk imposed on the power system can be mitigated.** If we want to reduce the current power import dependency it would be better to strive for reaching an exporter position. But the fact is that a country poor in primary energy (fuel) and capital cannot go for a net power exporter position, but this position should be rather regarded as a given status or as a forced constraint based on the role of the Hungarian balancing zone in the regional market, namely that has no price setting role. **Thus the 54% share of nuclear energy in domestic generation set out in the action plan concept seems to be too high.** As the required guarantees are missing, this might also mean that **Hungarian consumers will have to bear partially the burdens arising from the major unit project cost and/or increasing need for state subsidy.** We propose **to analyze changes in supply and demand in the regional electricity market and in Hungary's role at the regional energy markets** prior to adopting the relevant project decisions.

**AmCham wishes to highlight that the action plan should inevitably address, in proper extension and depth, the natural gas-firing power plants and opportunities for power storage,** with regard to the ambitious share of both nuclear and renewable energy, and as minimum, in connection with the system balancing issues. Based on the size of the new nuclear block(s), and the increasing share of renewable energies, increasing of reserve capacities to retain the balancing possibility of the Hungarian electricity system and ensuring compliance with the UCTE requirements will be simply indispensable, while significant gas-firing power plant units leave the Hungarian electricity system.

**The Chamber welcomes** that the Government addresses, in addition to nuclear energy, also the role of coal in the future energy mix. Domestic coal reserves represent an alternative solution (with long term competitiveness) in meeting the electricity baseload demands in terms of technical feasibility and cost levels, with specific regard to lignite. Retaining or eventually increasing the role of coal in the domestic energy supply would significantly contribute to reducing the exposure to import dependency, and thus to gain independence from global price tendencies. Careful analysis will be required for ensuring long term exploitation of domestic coal reserves and thus for applying available clean carbon and CCS technologies. In addition to making use our domestic reserves, we should do our best to ensure efficient utilization of such reserves and to improve energy efficiency as mentioned above.

**AmCham is convinced** that when details of certain actions (listed below) are finalized, the Government should utilize the professional knowledge and experiences of the market players. The Chamber proposes the following:

– To introduce a **capacity mechanism,** which can promote implementing modern, high efficiency and flexible power plant projects, specifically with the intention to enter into the balancing and reserve energy market, keeping in mind that the current and expected market and regulated prices will not enable implementing and sustaining such projects (as experts agree), while the country is clearly facing and will on medium term face increasing system balancing problems;
– To simplify the licensing process for power plants both above and below 50MW capacity;
– A new subsidy scheme of renewable energies should be prepared and approved - as

soon as possible;
– The heat and power combined units partially already paid-back through consumer tariffs (so-called KÁT) should remain in operation, thus realizing the previously defined energy saving and emission reducing targets.
– The power plant development action plan should contain information regarding the Government's actions towards harmonizing the European regulatory system – in addition to the physical cross-border capacities to the European natural gas and electricity transmission networks – keeping in mind that today the major power plant projects take into account not only the demand and commercial opportunities of a given balancing zone.

***AmCham proposes to introduce a capacity mechanism which could promote implementing modern, high efficiency and flexible power plant projects***

## Gas sector

Several international organizations, including the International Energy Agency, have recognized the increasing role of natural gas in power generation and its significance regarding mitigating the effect of climate change. Hungary has outstanding potentials in the gas business (domestic resources, diversified import source and transmission route, massive gas infrastructure, potential gas hub role, etc.) thus we can use this to strengthen our gas market role in Central Europe and also to use natural gas for power generation.

***Natural gas should receive an appropriate role in the power plant mix***

**AmCham encourages** the Government to give more focus to natural gas as the primary energy source of fuel when the power plant mix is decided.

The Chamber supports the Government in preparing a detailed analysis on the potential gas import market models after the expiry of the long term natural gas import contract (i.e. 2015). It would be critical to develop a model and regulatory environment which can result in **benefits arising from gas-gas competition from various sources of supply** to end-consumers. To this end the **gas market should be analyzed on regional level, Hungary's hub role should be exploited, and ToP contracts concluded for major gas volumes should be avoided. The regulation should be ownership-neutral and free of any discrimination** in order to ensure efficient competition.

***The new gas market model should be based on gas-gas competition from various sources of supply, as an ownership-neutral and discrimination-free vehicle***

**AmCham specifically wishes to point out** that eventual reduction in the role of natural gas on national economic level would most probably lead to declining utilization of the Hungarian gas system, and this would cause higher unit cost and also higher network tariffs for the consumers who remain in the system, particularly for price-sensitive household consumers. Various energy saving actions will further strengthen this process in the near future.

**AmCham encourages the Government** to carefully analyze opportunities for domestic natural gas production and for incentives for domestic un-conventional hydrocarbon production, to revise the outdated mineral resources assessment and evaluation structure, to simplify various licensing processes, etc., as the Energy Strategy fails to address these topics in merit when discusses issues related to the security of supply despite the rising natural gas demand forecasts.

### Change in traffic structure

**AmCham agrees** with the principle that re-structuring in traffic should be implemented – inter alia – through various energy efficiency actions. It also calls the attention that through spreading of certain vehicles (mainly electricity and hydrogen driven cars, expanding role of biogas, shifting road transportation on railway) are indeed potential options, but they have different time horizon and not all of them can comply with the relevant criteria set out in the Energy Strategy. **AmCham proposes** to prepare an analysis comparing the different actions with Hungary's opportunities and competences, and also the efficiency and cost of each solution. As described in the analysis of the International Energy Agency, reducing greenhouse gas emission will have different cost

consequences. Replacing fossil energy carriers will be the most expensive in the traffic sector, thus careful planning would be required particularly in this area.

***Replacing fossil energy carriers will be the most expensive exercise in the traffic sector***

**AmCham has the view** that improving motor efficiency and hybridization and applying second generation bio-fuels with low carbon-intensity have huge potentials. Domestically produced biomass should be utilized with maximized efficiency and minimized losses, because this is the only way to ensure maximum energy savings from extra expenditures and to genuine reduction in greenhouse gas emission.

## Assuming state's role, investors environment

***The Energy Strategy does not unfortunately focus on market competition***

**AmCham agrees** with the concept that each energy submarket should be analyzed on cross-border and regional level, however, it **deplores to state that the Energy Strategy does not focus on market competition as the most efficient tool of consumer protection.** Benefits arising from establishing competitive markets should not under-estimate neither from end-consumer nor security of supply aspects.

***The state's role will be to ensure a regulatory environment with long term predictability and to manage market failures***

AmCham has the view that **the state's role should be focused on the development of a long term predictable regulatory environment, within that to manage market failures, and** not so much on acquiring ownership over market assets.

***Statutory price regulation should recognize the actual cost and ensure normal market profit***

**AmCham supports** the Government's concept that system operator's activities (off-take/transmission, distribution, storage) should be carried out under strict statutory cost control, and accept the social need for providing answers to the problem of energy poverty on the mostly affected submarkets. **However, the Chamber would point out that regulation should recognize actual cost, should reduce losses arising due to the regulatory environment and should ensure a normal market profit,** otherwise **operations of both electricity and natural gas markets might be exposed to danger,** and other submarkets might receive distorted price signals, which will thus **make projects that are inevitably required for ensuring long term security of supply impossible.**

***Statutory price regulation applied in Hungary does not provide incentives for projects***

While price regulatory mechanisms aiming at project incentives are introduced on international level, at the same time **the price regulatory steps applied in Hungary may have even on short term extremely negative consequences. The regulation is far from the market rates of return that are applied in various areas of the natural gas and electricity system (they in fact fail to reach even the risk-free rates) and it can fundamentally hit and erode investors' efforts aiming at the sector.** Cooling or shutting down projects that are required for sustaining various energy systems and the expected level of supply and services will firstly increase the supply risks and black-outs, and secondly **might cause a break in the timeline of incorporating and fitting such continuous projects into the system. Replacing such losses will be extremely difficult and can only be implemented if we resign from other important development targets.**

***If projects are not implemented, it might cause problems to security of supply***

**All this will increase the risk that consumers will later have to face with dramatically rising prices.** (Not so much arising from higher prices of energy sources, but rather due to appearance of real operating cost of the systems and restoration of the energy supply.)

***Investors' confidence must not be further eroded***

**Further erosion in or eventual collapse of the investors' confidence might push the total energy sector, moreover also the state budget into an extremely difficult situation. Restoring the confidence and reliability will for sure be a very long and time-consuming process and it will require very high cost for the country.**

**AmCham agrees** with the principle specified in the Energy Strategy that energy policy and social policy should be separated from each other. Thus **the Chamber encourages the Government to apply cost-based pricing ensuring normal**

**market profit on the universal service provider (USP) markets,** (which will have effects also on other, i.e. non-USP markets) **in order to sustain the security of supply and high-quality services, as well as to analyze the opportunity for introducing in the future a targeted subsidy system based on social need and financed from budgetary funds.**

*Energy policy and social policy should be separated*

AmCham welcomes that the Energy Strategy highlights the importance of predictability of the investors' environment and the need for credible institutions. These are extremely important goals, **so encourages the Government to secure, as soon as possible, the consistence between the existing, actual legal regulatory environment and the identified targets. The Chamber also points out that actions should be taken for ensuring ownership-neutral and discrimination-free interventions in order that various energy policy goals can be fulfilled.**

*Ownership-neutral and discrimination-free regulation should be established*

The Chamber proposes that in order to fulfill the publicly documented national economic and energy strategy goals **consultations should be first held in the sector and changes in law can be introduced only after that** – and not with retroactive effect – **as this can establish a predictable environment for investors and thus promote investment decisions in the energy sector.**

*AmCham has the view that a predictable and investment-friendly legal framework should be established*

**To sum up, AmCham agrees with the concept that a predictable and investment-friendly incentive scheme should be established. In this context it is critical to specifically point out that the Chamber would support any and all sustainable and predictable actions which can enforce improvements in the investors environment and strengthen the liquidity side of bank financing required for implementing such investments, and which is also ownership-neutral and discrimination-free.** In the Chamber's view this is the only way to secure harmony among the Government's strategic intentions, the actual market opportunities and the availability of investment funds. **AmCham proposes to establish an Energy Roundtable, as promised before, which can function as a comprehensive consultative forum for developing actions that can set the course for the Hungarian energy sector on a sustainable and progressive way, as it has been identified in the National Energy Strategy.**

*Chamber supports the establishment of an Energy Roundtable, which can function as a comprehensive consultative forum*

## Footnotes

[1] 21/1993. (IV.9.) OGY Resolution on the Hungarian Energy Policy; 40/2008. (IV. 17.) OGY Resolution on energy policy between 2008-2020.; 77/2011. (X. 14.) OGY Resolution on the National Energy Strategy.