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## **Social Conflicts in the Shadow of the Paks Nuclear Power Plant**

### **Abstract**

*Since the use of nuclear energy has become a possible global solution for the replacement of traditionally used fossil energy resources, it affects the public realm in Hungary, as well. The aim of this paper is to provide an insight into social aspects of constructing and operating of the nuclear power station in Paks, which is the only plant of this kind in Hungary. Social aspects will be analysed according to two types of phenomenon—NIMBY and PIMBY, which reveal people's level of disagreement and protest (NIMBY), or their approval and participation (PIMBY). In the light of the presented results, as well as of the global nuclear energy tendencies, the attitude of the people towards the recent proposals for nuclear repository in the Southern Transdanubia Region will be considered.*

### **Key words**

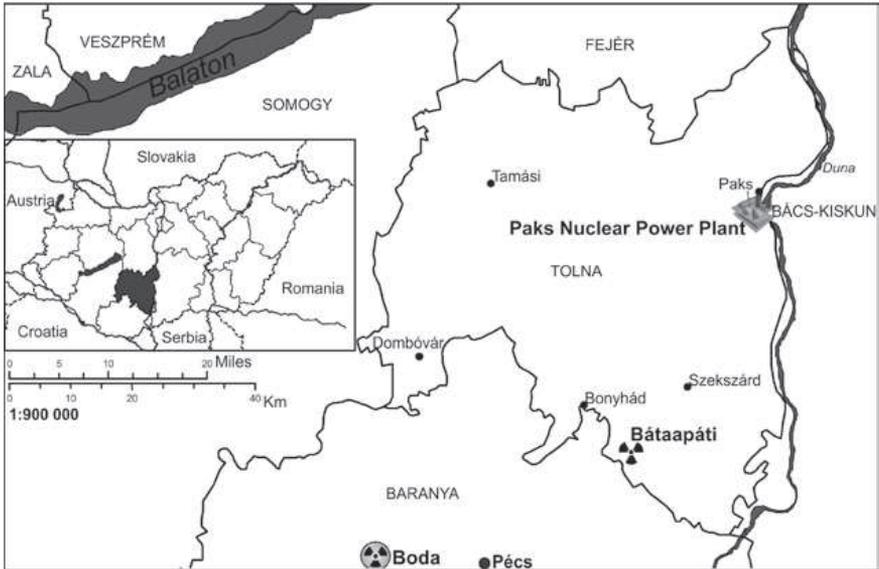
*Nuclear power station; NIMBY phenomenon; Nuclear waste repository; Social conflict*

## Introduction

Providing long term energy supply for *Hungary* is nowadays a top priority issue which is characterised by bargaining in the background and the clashes of strong lobby interests. Moreover, the forecasts of depleting fossil fuel reserves have been published since the 1960s. There has been an on-going dispute on the ratio of fossil and renewable energy sources and the process of “reducing” the usage of the conventional sources of energy (e.g. coal, crude oil and natural gas). The question of nuclear energy plays an important role in the public discourse, especially in issues relating to the safe operation of a nuclear power station and the transport and storage of the accumulated radioactive waste. The case of the power station in *Paks* is no different, as the social conflicts of the indigenous local and the newly arriving settlers began as early as at the beginning of the construction. Later, they affected the field of politics and brought about serious changes in the once quiet town on the banks of the river *Danube*.

Contrary to the examples of *Germany* or *Austria*, Hungarian people do not overwhelmingly reject nuclear energy, although it is not clearly supported either. It is no wonder that the society is so divided on the issue of nuclear energy supply, as there are many well-known pros and cons of this type of energy source. Amongst the arguments against nuclear energy, we find *Chelyabinsk*, *Three Mile Island*, *Chernobyl* and the recent disaster in *Fukushima*, plus several other accidents that occurred in radioactive waste repositories. In the Hungarian context, it is also worth mentioning that in the period between 1991–2003, there were 380 incidents requiring investigation and that occurred in the *Paks Nuclear Power Plant*; 18 of them were classified as malfunction (VAMOSI, B. 2012). Nevertheless, this power station is one of the major employers in the *Southern Transdanubia Region*, and as such, it is important for the people living in *Paks* and its vicinity, especially when it comes to the significantly high incomes provided for the local budget.

This study analyses the conflicts that have occurred in investments and constructions (the NIMBY phenomenon) in the context of the social-environmental conflicts related to the *Paks Nuclear Power Plant*.



**Figure 1 – Paks Nuclear Power Plant and nuclear waste repositories in South Transdanubia Region**

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## 1. The NIMBY phenomenon

It is a well-known fact that people usually do not like having a dangerous or hazardous power station in their neighbourhood. This is called the *NIMBY phenomenon* (“Not In My Back Yard”). Although, citizens do acknowledge that certain factories, power stations, industrial and military establishments, and landfills have to be constructed in a country, they reject to have them built in their vicinity. A more extreme form of this phenomenon is evident when the residents doubt the rightfulness of the construction and reject the idea itself. This is often called the *BANANA phenomenon*, meaning “Build Absolutely Nothing Anywhere Near Anybody”. In connection to NIMBY, the issues of personal involvement and the related personal risks appear, manifesting in protest and rejection as the common goal. Usually, this rejection formed into collective action is not willing to accept any compromise until the developer abandons the site or compensates in a timely and adequate

manner. The amount of the compensation is primarily calculated with an economic approach after the cost-benefit analysis. This takes into account the financial status, the natural environment, the infrastructure of the construction site and the living conditions of the residents. The investor offers a viable compensation for these values which is considered enough to eliminate the expected resistance of the residents. O'HARE, M. (1977) warns that the calculations usually do not appropriately emphasise the psychological effects which may be just as important as the financial solutions. Significant elements to this include the possible metaphysical appreciation of the habits; the existence of the feeling of an extended private sphere which perceives the effort to modify the environment as a violation of the personal sphere; the exaggeration of risk perceptions; transformation of the protest against constructions into a demonstration against power station and the defiance that is apparently without a cause. O'HARE also examined how rational individual actions are transformed into irrational community stand-ups, in which different opinions are not formed along community interests, but as a mass of individual suggestions without convergence. The researcher called this the "multi-person prisoner's dilemma" suggesting that an unwanted construction may be performed even with a rejection rate of 90%, if the remaining 10% persuades the majority, claiming that it is in the community's interests. It is even more so when the minority is made up of the distinguished members of the town or the district, or the municipal government supports it.

The main reasons for the NIMBY behaviour are (KRAFT, M. E. – CLARY, B. B. 1991):

- distrust of the investing corporation or its representatives;
- lack of information, signs of secrecy;
- benefits and possible negative consequences of the construction do not compensate each other
- inherent conflicts in the local traditions;
- negative memory of similar constructions.

To understand environmental conflicts and the NIMBY behaviour, the theories of MCADAM, D. (1986) on the expansion of movements and mobilisation shall be examined, as they may provide answers to what is behind the collaboration in environmental cases. The researcher distinguishes among low risk, low cost activism and participation requiring high costs, efforts, time or involving high risk. The first one articulates general goals, rejects presumably harmful future constructions (such as a nuclear waste repository, a cement plant, etc.) in a certain municipality and tries to regulate these efforts at a legislative level and present them as concepts. It, therefore, articulates and submits petitions to decision-makers, collects supporters, publishes articles and organises street gatherings. In case of the low risk action, it is usually the activists of the movement or organisation that perform the activities with the aim to inform or persuade the contacted people (residents, "people on the streets") or pre-defined social groups (students, professionals, politicians, etc.). In connection to high risk participation, we may mention specific involvement when the community is formed to halt a construction near its housing, school, workplace or any other site with emotional bonds to these people. In these cases, the movement consists of loose organisational ties because identity is not formed by loyalty to an organisation or a vague ideology but by personal bonding and the fear of possible future hazards. Such movement alliances are usually active as long as the problem exists, then their activity is dissolved or suspended. They may still serve as an example to other initiatives.

SNOW, D. – BENDFORD, R. D. (1988); KRAUSS, C. (1994); SHEMTOV, R. (2003) and others agree that the NIMBY is a local network of individuals and groups that serves as a connecting medium between global and local protests. The arguments of the protest may be related to local specialities and may be supported by general thoughts that reinforce and back the group's demands. The networks are usually not formed without a history; familiarity and common interests are the foundations of trust. However, not all initiatives reject the possibility of a compromise due to their conflicts of interest. The parties usually con-

sider each other more of an enemy and less than just an opponent. The behaviour of local politics fundamentally influences the possible radicalisation of the NIMBY group. In case of the politicians in a decision-making position, they turn their backs to managing social will, they do not participate in finding the proper solutions and are unable to mediate between interests. Therefore, a legitimacy crisis may evolve. The initial protests may expand to other areas and form alliances that would not work out under "ordinary" circumstances. It is also possible that after the movement's initial successes, a larger, more general organisation is created that may take up a political role to reach its goal(s) (KRAUSS, C. 1994). According to GORE, A. (1993), the NIMBY symptoms are the beginning of a healthy tendency, since they make the decision-makers understand that the "backyard" is virtually the home of all mankind.

Based on the goals, NIMBY initiatives may be classified according to the following seven types:

1. Protests against the construction of landfills, waste storage facilities and incineration plants.
2. Protests against the construction of high-voltage wires, transformers, oil and natural gas pipelines near residential areas.
3. Protests against the construction of power stations, especially nuclear power plants.
4. Protests against the construction of polluting factories, facilities emitting radiation, mining complexes, industrial and military facilities.
5. Protests against the construction of public buildings causing noise (ambulance, police and fire services).
6. Movements for a clean environment (proactive activities for cleaning the settlement or residential area, or keeping it clear).
7. Movement for a secure alternative, a safe future.

The directions and tools of single issue initiatives may change during the protest-negotiation process. While the original goal remains intact, the expansion of the protest group enables the influx of new

interests at a local level and also at a regional or national level considering the initiative as a whole. The rhetorics also changes in many cases. It adjusts to the system of aims and possibilities. The initial “direct rhetoric of aims”, i.e. halting the construction and resistance, overwhelms the communication of the protesting individuals and community. The discourse may later gain extra value as a result of highlighting the protection of environmental values and taking advantage of the “vulnerability course”. The aim of the latter is to present the protesters as toys in the hands of corporations, industrial giants and politics and, therefore, gain support from the public. The research of SNOW, D. – BENDFORD, R. D. (1988) proves that the appropriate rhetoric depends on the social status of the protesters, their income status, educational background and trust index. The NIMBY is most successful where the participants of the initiative are middle class or upper middle class individuals with good connections to politicians (SHEMTOV, R. 1999).

Green organisations and networks usually appear as actors of the NIMBY conflicts, on the side of the opponents of the construction, and they work to overstate the expected risks. REPHANN, T. J. (1996) created the typology of the protests against certain constructions, in which he emphasised the responsibility of the greens. He argues that in NIMBY, the greens appear as generators of the conflict and not take the role of mediators. They highlight the dangers but fail to provide an alternative. For the sake of completeness, we have to add that in some cases, the local community protests against the placement of the possibly polluting plant or they may tolerate it for the sake of the expected compensation. The residents hope that the profit from the construction (such as local business taxes) will exceed the negative effects. This phenomenon is called “Put In My Backyard” (PIMBY).

The participation of individuals, non-governmental organisations, and movements in environmental and environment-related cases may be classified according to the following four categories. On different ends of the scale, we find protest (e.g. rejection) and cooperation, con-

trolling activities. The actual means of participation depend on the given case and the choice of the participants themselves.

1. Protest (in compliance with the laws [legally] or defying the laws [illegally])
  - a) against a planned or already operating project (prevention);
  - b) against pollution itself, demanding the termination of the polluting activity, an inspection of the case and the punishment of the culprit;
  - c) against the development policy of the government or the local government (pressure).
2. Participation in the cases related to development projects, in the framework provided by the laws in force: elaboration of strategies, concepts; participation in steps of public policy decision-making (especially in regional and municipal development, rural development and other policies)—the task of enforcing environmental and sustainability interests.
  - a) The role of interest articulation: the development of specific interests and needs, raising issues to be discussed.
  - b) Providing information and communication.
  - c) Expertise and advice: the demand for defining present and future needs and directions.
  - d) Innovation: development of new solutions, approaches; suggestions for the transformation and “improvement” of operating systems (energy, transport, education, healthcare, social care, tax policy, participation forms, development policy)
  - e) Conflict management:
    - exploration of the power relations and interests of the affected actors;
    - information and involvement of the affected groups, development of communication channels;
    - creation of compensation mechanisms;
    - the making of complex impact studies (HORVÁTH, M. T. – SZIRMAI, V. 2000)

3. Partnership based on the permanent cooperation in the work of the government/local government. A primarily advisory and informative role that presumes loyalty, expertise and social familiarity; secondarily in relation to providing public services. Cooperation with pre-defined organisation or with ones selected, created by the governmental body or work group, committee that is created as a permanent or temporary expert group and provides recommendations related to policy preferences.
4. Legal proceedings: the non-governmental organisation participates in the approval process of the planned construction as a client and creates legal obstacles to hinder the realisation of the project. The pillars of the right for community participation have the right to receive information, engage in the freedom of expression and have the right of appeals (as independent parts of client's rights). The need of citizens to participate in administrative proceedings is considered important for the community (which has increased in the last two decades). It is almost naturally transformed into certain rights of client's rights, however, without the demand of the affected parties (PÁNOVICS, A. 2011; FÜLÖP, S. 2012; GAJDICS, Á. 2012). An elementary dilemma of participating in administrative and other decision-making proceedings is to harmonise an early and well-informed participation. If the decision-maker only focuses on early participation, the residents and their organisations might not have adequate information to judge the planned project. However, if they wait until all the required information is available, the developer is usually financially and morally committed to an alternative of the project, and the decision-makers may also theoretically decide on a possible decision, therefore making only formal participation in the process.
5. Monitoring role: monitoring of projects, especially concentrating on (e.g. environmental, economic) sustainability aspects (watchdog function). It is the duty of the non-governmental organisations to trace and measure the results of a certain policy.

It is important to have an effective and transparent monitoring system, which ensures that the policy/programme realises its goals, and that the aspects of sustainability are enforced (with regard to each aspect of sustainability).

The framework of a participatory democracy provides the opportunity of participation; laws and negotiation mechanisms ensure that opinions, objections and suggestions are articulated and mediated towards decision-makers and the society in an institutional form. The effectiveness of this process greatly depends on the degree of the mentioned openness and trust which are preconditions to the negotiation process. Without this, cooperation may turn out to be an empty formality, significantly decreasing legitimacy and the public approval of decisions.

## **2. Social conflicts in Paks**

The search for the site of the nuclear power plant planned in *Hungary* started in 1966, and the final decision to choose the most suitable place on the right bank of the *River Danube*, south of *Paks* was made in the autumn of 1967. The construction plans had been finalised by 1968 and the landscaping works were carried out during the following year. The swiftly commenced work came to a halt in 1970 because the expected costs of the construction exceeded the original plans. Moreover, the national decision-makers were already hypnotised by the prices of cheap hydrocarbons and, therefore, turned to the development of coal and gas power plants. The original contract was concluded with the participation of the *Soviet Union* in 1955. It was amended to finish the first 440 MW-unit in ten years, only in 1980. Not much later, the economic changes and the sharp rise in oil prices (the 1973 oil crisis) made it clear to the competent bodies that the country's energy needs would not be satisfied without constructing a nuclear power plant. This became even more obvious when the construction of the *Gabčíkovo-Nagymaros Waterworks* failed. In 1973, the halted landscaping works continued and in the same year, the construction of a new housing block also began (SIPÓS, T. 2010).

The village of *Paks* lacked adequate human resources as well as the workforce and expertise required to build a nuclear power station. By the time of laying the cornerstone of the construction in 1975, several thousands of people had to be settled in the settlement on short notice. The mass of new inhabitants was settled outside the town at an external site that previously served as an agricultural area near the village. After the housing blocks were constructed (in 1973), the area was named '*Lakótelep*' (Housing estate). The lifestyle of the residents in the *Lakótelep* was isolated from the original residents of *Paks*, spiritually and spatially. The workers for the construction arrived from *Tatabánya*, *Pét*, *Ózd*, *Dunaújváros* and were used for urban infrastructure which provoked aversion from the "old" residents of *Paks* who were also suspicious about the lifestyle of these newcomers.

After the construction, the hierarchy of the local community has also significantly changed. Before the construction of the nuclear power station, the leaders of the local (primarily agricultural) community were on top of the political elite of *Paks*—comprising of chairmen of agricultural cooperative, heads of the canned food factory and school headmasters. After the power station was built, the chief engineers moving to *Paks* took their positions. This change did not only affect the municipality's highest political levels but also the lower levels of the system. Original residents could profoundly evaluate the shift in powers by stating that they had become second class citizens of their own town, contrary to the newcomers that arrived to participate in the construction project. This standoff remained intact on the levels of local council leaders and other higher political positions. Consequently, this enabled an "alien" (meaning that he was not born or educated in *Paks*) to be selected as a political leader of the community on numerous occasions (BARKÓCZI, Cs. 2012).

In the first period, most of the power station employees were not connected to *Paks* at all, except through their jobs. Till the mid-1980s, the *Lakótelep* looked like a ghost town on weekends, as the residents usually used the period between working days and the weekend to commute between *Paks* and their hometowns/villages. In this situa-

tion, the city leadership aimed to create a community place that could “naturalise” the worker communities of the *Lakótelep* in *Paks* and forge them with the original residents of the settlement. The element required to create a common *Paks* identity. The secure social cohesion was found in sports. The basketball, judo and football associations were developed and they became key factors of success in the 1990s. While social conflicts eased at the end of the 1980s (and practically disappeared by the 1990s with the expansion of work opportunities), other problematic issues started to arise in connection with the nuclear power station. Every one of the citizens has at least a relative, friend or a close acquaintance that works at the nuclear power station, so it can be declared that the plant breathes together with the town. This is why it is plausible that 91% of the town’s residents agree to having the facility, while only 2% disapproves it, according to a survey conducted in 2012 (NAGY, R. 2012).

### **3. Issues of the nuclear waste repository**

Compared to other parts of *Hungary*, issues causing public resistance occurred very early in the *Southern Transdanubia Region* (in the last years of the 1980s). These issues also provided a framework of the appearance of non-governmental organisations dealing with environmental protection issues. The landfill in the village of *Garé* was the first environmental case in the region that mobilised large numbers of the local population. In the 1980s, nearby residents complained about the deterioration of the water quality in the wells and spotted an increase in animal deaths. The conducted inspections discovered that a part of the metal barrels containing liquid waste were damaged, and the radioactive waste escaped to the nature. After some contradictory water examination results and debates, it was proved that the contamination reached the aquitard and entered the groundwater. The landfill was later closed down, but environmental damages remained significant. After the fall of socialism, the coal and uranium mining industry in *Tolna* and *Baranya* counties collapsed, the mines were eliminated, but recultivation efforts are still unfinished to date. There is new infor-

mation on a possible reopening of these mines, initiating civil associations. *Hungary's* only nuclear power station is situated in the region—in *Paks*—and this factor still raised questions about the amount of radiation and the transportation of the created nuclear waste.

The analysis of the issues related to the establishment of the nuclear waste repository can be approached from the already discussed NIMBY and PIMBY phenomena; and the risks, dangers and perceptions of dangers articulated toward the decisions on construction. Research shows that the opponents of nuclear waste repositories articulate concerns regarding health, safety, the economy, the environment and the technological and decisive processes (SZÁNTÓ, R. 2008). The problem of placing the by-product created by the operation of nuclear power station (nuclear waste) is of high risk and requires long and increased attention. The plans for placing low and medium level activity waste had already caused social, political and environmental conflicts before the transition to democracy. According to plans publicised in the mid-1980s, the waste was intended to be managed via the *Council for Mutual Economic Assistance (COMECON)* by transporting the accumulated waste to an area outside of *Hungary*. Due to various reasons, this concept later failed, and the management of the *Paks Nuclear Power Plant* realised that the waste had to be transported and placed somewhere inside the country (SZIJÁRTÓ, Zs. 2010).

Followed by this, geological explorations and drillings were conducted at numerous possible sites and later reduced to a handful of possible alternatives. The research and the authorisation processes already began in the late 1970s, but neither the public nor the residents of the affected area were informed about the necessity of the repository. That was typical of the socialist government behaviour of the era. After inspecting and rejecting some possible locations, the decision to build the nuclear waste repository in the area of *Feked-Véménd-Ófalu* was made in 1983 (BALOGH, J. *et al.* 1990). Apart from the requested physical geographical features, the region met the expectations as it was a priority for the location to be in the vicinity of the creation of the nuclear waste. The power station only published the

plans of the nuclear waste repository four years later and declared them to be final facts not only mere plans. Unsurprisingly, the residents voiced their outrage, not only because of the risks the construction involved, but also because of the secrecy of the planning process. Moreover, the protests against the *Ófalu project* were complex and incorporated many interests and emotional-mental imprints (SZIJÁRTÓ, Zs. 2008), including the *Chernobyl disaster* in 1986 and the “secrecy” surrounding it.

The conflict that erupted is interesting in many aspects. The experts of the power plant and representatives of the government did not understand the fundamental reasons of the rejection perceived from the residents. Therefore, no communication space could be created to solve the conflict. On the other hand, the civil cooperation had no pattern, no case on which the locals could have built their resistance. It is, therefore, safe to say that they gradually “learned” how to protest.

The social composition of the protesters showed a very mixed picture. Residents were mostly employed in agricultural sectors and were mainly driven by emotional motivations. Their fear of the unknown and the concern that the construction would completely overturn the traditional lifestyle of the village was more than evident. The younger generation of residents played a very important role in radicalising the protest, as they grew up in the more liberal, less authoritative *Kádár regime*. As the country was nearing its transition to democracy, the role of publicity increased. The press also paid attention to the case and entered the conflict arena, mostly by providing neutral information.

With the increasing media attention, a new group of actors appeared in the conflict. Its motivations were similar to those observed in the case of the *Gabčíkovo–Nagymaros Waterworks*. A loosely organised group consisting of intellectuals appeared on the scene, especially in the area of *Ófalu* and *Pécs*. Its members were teachers, doctors and other groups of intellectuals who declared that they were willing to represent the interest of the villagers. It can be stated that the help of this group was not motivated by emotional factors, but by only one

(more or less typical for all social groups) thought: protest against the government and the form of decision-making. They recognised that, in relation to an environmental conflict, they could criticise the communist government with less risk, as they did not directly argue with the political elite. They only reflected on the legal irregularities and the possible shortcomings of the construction process, and system anomalies, (the fact of secrecy).

Newly formed opposition groups (such as *Fidesz* [Alliance of Young Democrats] and *MDF* [Hungarian Democratic Forum]) recognised that the protest against the nuclear waste repository was a springboard to strengthen and promote the developing parties, since the conflict powerfully echoed in the media, and their messages were easily spread via TV, radio and the press. The case was also an important catalyst for the new non-governmental organisations, associations and experts (VÁMOSI, B. 2012). Due to the deep crisis of the political-economic system, the government could not risk another conflict and completely passed the responsibility to the *Paks Nuclear Power Plant*. The power station tried to compensate the village, especially in the form of infrastructural developments (such as the construction of a doctor's office and service apartments, the establishment of a guest house, and contribution to the renovations of roads and a school building). This "gesture" did not work. After the enduring negotiations, the villagers felt that they were being bribed. The residents articulated this opinion at the public hearings and in the media very loudly. The then almost unknown concept of unemployment could not influence the possible acceptance of the compensation, as the nearing crisis of the transition to democracy was alleviated by the prosperous local agricultural cooperatives. After publishing the plan of the repository in 1987 and the increasing protests, the power station gradually lost its prestige and reputation. The case was finally closed with a political decision of the ruling party in 1988 by not issuing a building permit for the area of *Ófalu*.

Until 1997, the low activity radioactive waste of the *Paks Nuclear Power Plant* was placed in the *Radioactive Waste Treatment and Dis-*

*posal Plant* in the village of *Püspökszilágy*. However, the facility was filling up and a new location had to be found for the hazardous material. For choosing locations to dispose low and medium activity radioactive waste, the affected authorities were examining the whole territory of the country from 1993 to 1996, and the research included the municipality of *Bátaapáti*. From 1994, it was a selected target and in early 1997, the decision was made to start detailed explorations in the vicinity of *Bátaapáti* by providing complete public access to all of the related data. Surface geological exploration ended in 2003 with the affected authority deciding that the *Bátaapáti* site was geologically appropriate for the indefinite placement of radioactive waste. During the preparation for the “waste repository”, the NGOs cooperating in the cases of *Garé* and *Ófalu* “came together” again. But since the village received a significant amount of development tenders financing other incomes, and the project provided employment to about 50 locals, the protesters received no significant public support.

In Hungarian practice, compensations play a significant role in influencing decision-making in environmental issues. Compensation is a frequently used tool to persuade the citizens of the settlements and the local governments facing financial hardships. For example, landfills are typically constructed in villages with a small population and low sources of income. *Bátaapáti* was one municipality meeting these criteria. It is situated in a valley, in a regional cul-de-sac with high levels of unemployment. Disadvantaged villages with high levels of unemployment, low incomes and scarce resources of the local government are usually happy to receive the offered projects for the related economic advantages and the projected developments (Kiss, G. 2012). Surface geological exploration was finished in *Bátaapáti* in 2003, and a local referendum was organised on 10<sup>th</sup> July, 2005. With participation rates of 75%, the construction of the repository was supported by 91% of the residents, thus the results confirmed and also provided legitimacy for the construction. The works on the nuclear waste repository lasted from 2005 to 2012 with a budget of 68.5 billion HUF (app. 199 million GBP). The region was compensated with an annual

1million euro (850,000 GBP) beginning from the operation of the plant and divided among the villages and settlements of the region. The municipality's sewage and gas network was constructed and the three kilometres long road leading to the village was also built. The cultural centre was renovated and an old traditional estate was transformed into a community building. When the local post office closed, the village purchased the property and reopened it as a "tele house" with public internet access (GLIED, V. 2009).

Explorations related to constructing a high activity nuclear waste repository have been on-going in the *Mecsek Hills* since 1989. According to the geological examinations, the area of *Boda* in the *Western Mecsek* is appropriate for establishing a repository in the 2020–2046 term. The findings of the poll conducted in *Boda* during 2011 by the *Public Limited Company for Radioactive Waste Management*, show that 27% of the residents would completely accept the planned repository, 40.3% would only decide upon receiving the results of the required examinations and 32% would reject it (RADIOAKTÍV HULLADÉKOKAT KEZELŐ KHT., 2011). A new movement is currently undergoing against the reopening of uranium mines and the construction of the repository in *Boda*, called "*NeMecsek*" (*Not onto Mecsek*).

#### **4. Conclusion**

Surveys made in the past decade have shown that the Hungarian society does not reject the operation of *Paks Nuclear Power Plant*. However, the proposed expansion sets new questions about the financing of the investment and necessity. The need for the expansion of the nuclear power plant—which currently provides 43% of the Hungarian electricity supply—is also queried. After the disaster in *Fukushima, Japan*, the *German government* announced in 2011, that by 2022 all the German nuclear power plants will have been shut down. Moreover, similar decisions have been made about the withdrawal by the Italian, Swiss and Japanese governments, too. The German decision and the Italian referendum in 2011 made clear that decisions against nuclear energy could be formed by not just energy and financial considerations, but

also by emotional and political motivations. That can be seen in those countries where the anti-nuclear attitude of the society is high and the political elite can achieve success by making similar decisions.

In 2003, *Greenpeace* organised a protest action in *Paks* against the lifetime-extension (prolongation). The group, which demonstrated without permission consisting of Austrian, Dutch, Turkish, Slovakian, Romanian and Hungarian activists, chained itself to the entrance of the nuclear power plant. They could not achieve success and the action remained without an echo. It is not the nuclear energy security risks which are primarily mentioned concerning the expansion of the plant. It is rather the costs of the planned construction of new blocks and the restart of the uranium mining in the region of *Pécs*, which are in the forefront of the related debates.

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