# "Clear and present danger"... Or...?

- Opinions and motivations towards investments with high environmental risks -

#### Introduction

The objective of this paper is to focus on a new aspect of Ecomarketing. In the last decade the environmental issues got special attention because the public paid more attention to this aspect of business activities. The firms often have to face strong resistance of environmental groups or movements. Often the companies are surprised by these actions because they believe that the technology applied has not given any reason for opposition. Their sales volume strongly depends on their image and the "green-factor" is becoming more and more important factor [Piskóti 1997.].

The previous studies mostly focused on the citizen's relation to environmental issues and pollution in general. But they did not observe public consideration of "pollution" or "environmental-friend-liness". These researches made our picture brighter in terms of science but did not help to solve the company's problems.

In order to get better insight into the social effects of this issue, we have chosen two objects, an existing nuclear power plant and a planned recycling factory for the study.

We have to admit that these are only the first steps of the entire walk. We will also examine, with the same methods, besides public opinion some other important interest group behaviour, like investors locals and regional or national politicians. It is important to find cases not only on the national level but on a world scale as well.

## Research questions

There are two questions to answer when helping out the business sector in the first and public sector in the second.

1. Why can a large scale investment successfully work with positive judgement and why a new rela-

tively small scale investment could not be established mainly because regional protests? This is an interesting question especially because in the latter case – as we will see in the case study – the technology, the planned site or any other circumstances would not represent as big environmental risk as a nuclear power plant does, not only in terms of technical facts but public opinion as well.

2. What are the effects of the existing and the failed plants on the regional marketing strategy? In the first case we studied how one could successfully use co-operation between the power station and the local government towards the public as a marketing tool. Did they set the regional marketing strategies up on the power station in any possible way? How does the shadow-effect work? Generally the image of the region shadowing one of its firms but now the nation's only nuclear power station shadowing the region. The latter case – if we prove it – can be called "upstream shadow-effect"?

### Case studies

An existing Nuclear Power Plant: Paks, Hungary

The Nuclear Power Plant was built between 1974 and 1982. It started to operate in 1983. The Paks Nuclear Power Plant Ltd. was founded on the 1st of January of 1992. The owners' stock proportion is the following: Hungarian Power Companies Ltd. (MVM Rt.) 99,8674 %, State Privatisation and Property Ltd. (ÁPV Rt.) 0,0001% (golden stock), while the rest is shared among the involved municipalities. The power generation in 1997 produced 13,968 GWh. The company had a successful year in 1997 both from a production and an economy point of view. It provides more than 5.000 workplaces in one particular location.

Like in the previous years, in 1997 as well, the nuclear environment protection of NPP Paks aimed at

the control of radioactive releases of the plant, the definition of the value and composition of these releases, the continuous monitoring of the natural and artificial sources and conditions of radiation in the environment.

The control of the releases is performed in accordance with a thorough and well-planned measurement program, which provides a basis for the experts to get a more and more comprehensive picture of the physical and chemical characteristics of the radioactive components getting into the environment. In an evaluating the results of the whole year, it can be stated that both the airborne and liquid effluents are well below the strict regulatory standards, which is very favourable. Comparing the data with those coming from similar types of plants abroad we can see that these releases do not reach the average value given as standard by plants producing the same volume of electricity.

Other measurements proved that the radiation conditions of the environment were not affected by the nuclear power plant in a directly measurable way in the closer or further environment. It can be concluded from the above that the public dose increment coming from the radioactive releases – just like in the previous years – amounted to only one thousandth of the regulatory limit value in 1997 as well. It was ten thousand times lower than the dose rates coming from the natural background radiation. The information provided about these facts or any difference from this data is a measure of the political systems reliability [Lenssen 1992].

The nuclear power plant, which is operated by a competent, highly qualified and committed local staff is clean and environment-friendly. It does not consume oxygen and does not release carbon-dioxide, sulphur-dioxide, nitrogen oxides, dust, flying ashes or cinders. It does not contribute to the augmentation of the greenhouse effect which causes global warming up.

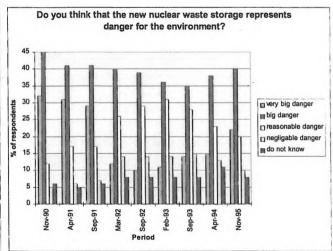
The improvement of the public judgement on the Plant was enhanced by the installation of a radiation protection display system in Paks. The device is suitable for following the changes in the natural background radiation and enables the interested people to compare the radiation conditions before and after the commissioning.

Similarly to the environmental effects, the Power Plant has been continuously monitoring the public opinion since 1991. A complex research was carried out twice in each year on the quota sample of 1.000 persons, attempts to be representative of the Hungarian population [MODUS/Paks Nuclear Power Plant Ltd., 1995]. This research strongly proved the positive public opinion about the Power Plant itself. Since 1991 60 –70% of the respondents agreed that a

nuclear power plant is in progress in Hungary. The reasons of the necessity are as follows: Hungary has shortage of energy (35–40%); nuclear energy is cheap (16–20%); nuclear energy is economically sound (12–15%); nuclear energy is sophisticated (13–15%); nuclear energy causes very little environmental pollution (6–14%).

Because the questionnaire did not contain fixedalternative questions the latest answer can be considered as a very positive environmental public opinion about the Power Plant. The respondents were also asked about the disadvantages of the Plant. The highest number (15%) but the average (6%) on the biggest fear: nuclear catastrophe. It is worth to emphasise that the environmental pollution as a disadvantage was only mentioned by 6% of the respondents.

The survey also showed that the public opinion did not change rapidly in hardly any of the questions. So we might interpret this as a positive result because by 1991 the public got used to the non-changeable fact of the existence of the NPP since 1983. (We have to mention during the establishing period the political conditions did not allow any protest, not even in survey against the NPP.) This theory seems to be proved by the result of another question as you can see on Figure 1. It is clearly visible that the recently planned Nuclear Waste Storage Facility has a strong negative reputation, even in this survey more than 40% of the same respondents consider the NPP security regulations far good enough and the Storage will have been running by the NPP.



We still have to consider that the recent reputation of the nuclear plant is above average, the main fears are based on myths connecting to the nuclear energy and its destructive power interpreted by the literature as well as movie films.

To know more about the opinion of the investors and other members of the business public as well as

the local authorities more research needs to be carried out in the near future.

Considering the second research question, it is worth to mention that Paks itself was a small town before (20.000 inhabitants) without any special regional role as well as importance. It became known as the site of the NPP [HCSO 1998]. Recently almost every business, cultural or sport event is strongly related to the NPP Ltd. Even the local football club is called "Nucleus Paks" sixty percent of the public transport equipment is used between the city centre and the NPP, situated a few km's south of the town. So, in the public of the country Paks, the town, represents the Power Plant. The fact that the Plant itself is not even in the town but closer to another small village called Csámpa is not known at all. The investors could only mention the NPP Ltd. as a successful company of the region in country scale.

As it was shown, the NPP spent a lot of money and effort to increase its reputation, as a safe and environmental-friendly nuclear plant. At the same time the town which is known as the home of the Power Plant shares the benefit of these efforts. Because of the NPP's unique situation – being the one and only Hungarian representative of a very strategic and sensitive issue: the nuclear energy – the usual shadow-effect turned the other way around. Normally the region or town shadowing in negative or positive way their companies [Ashworth, 1994]. In this case we called it "upstream shadow-effect" the company's stronger image shadowing the town contains.

To conclude the case we can establish that the recent positive motivation is a result of a long "living together" period and a systematic PR activity. This activity also gives advantages to the surrounding areas but we did not find any planned use of these advantages in the local marketing campaigns.

A planned Recycling Factory for the Used Car-Accumulators: Monok, Hungary

Perion Ltd. is the biggest Hungarian producer of batteries and accumulators. Due to its dominant position on the market, till 1990 the company had a limited scale of products. After the political change over as well as economical situation in Hungary, 8 years ago Perion has changed its product strategies in order to save its market-leader position it has achieved.

Perion Ltd. is continuously developing its recycling capacity. Replacing its former recycling factory that was closed in 1989, the company plans to construct a new one in Northern Hungary, Monok. Because of the relatively high unemployment rate in the settlement, the local government as well as the public strongly supported the investment creating 200 new workplaces.

The adapted Swiss technology is completely closed with double filtered system at the end-of-pipe providing the maximum safety for the recycling process. Any possible pollution will continuously be kept under control by using the appropriate lead sensors. Due to the on-line control, in any case of dangerous lead emission the recycling process automatically shuts down.

But Monok is a member of a world-famous historical wine district of Tokaj-hegyalja. This area strongly depends on the wine industry and therefore the success of this industry is very fragile. Firstly, because of the changing agricultural circumstances but also because of the fragile image of the qualitywine. The export of this wine involves about 16.000 farmers. If we compare this number with the future 200 extra employees, the latter one is a very small number even if the Recycling Factory would be a bigger than medium-size company on a regional scale.

Because Monok is in the peripheral part of the wine-district the inhabitants of the settlement are mostly dependent on the wine production. For this group of people the new investment was much more important than the reputation of the wine-district. The local government considered the possibility to leave the wine-district community, giving up all the advantages like naming and branding wines and having legal protection on products [Kaszás 1998a].

The conflict heightened between the wine-growers living in the heart of the district (Tarcal, Tokaj, Sátoralja-újhely) and the other – not strongly wine oriented – villages leading to street demonstrations [Kaszás 1998b].

The main problem was not so much the pollution of the planned factory, but the negative image of it. The actual danger was not the pollution of the product but the negative customer judgement what threatened the market position [Romhányi 1998]. It is actually the fear of fears.

Finally the company gave up the idea and located the firm elsewhere, but the case is still open and nowadays some political factors are involved as well.

This event still divides the public in the country. Some of the leading voices warmly welcomed the fact that "Tokaj saved its reputation being a traditional bioagricultural area". Others warned the people, that the region lost the most of its attractive forces for business purpose. They insist that this affair scared the greenfield investors away because they did not wish to face these kinds of artificially excited environmental problems again. The local authorities, up till now, did not respond with any regional marketing tool with regards to this issue. Neither the Community of Wine Growers nor the Local Government's Union built the "green-image" nor did it destroy the non-investor-friendly image with any possible way on purpose.

To conclude the case we can establish that the recent negative image is a result of the fear of possible market loss caused by fears of wine quality decreasing which is not possible as we have shown observing the accumulator recycling. Even the protests were successful, the initiators did not use this fact in their later regional activities.

### Final conclusions

After each case we already answered part of our questions. By comparing the two cases we believe we proved that the factors in customer behaviour are not strongly based on the actual danger that a particular object is representing for the environment. With a systematic PR activity beside a reliable functional performance even a strongly feared technology like the nuclear energy can turn regional friendly. We also have seen that other situations can be found when the region's image is more important than any other "hard" ability, so the danger, not the destruction of the environment but the destruction of the region's image is positively real.

It raises the responsibility of political decision-makers to judge which investments have to be forced and make accepted later and which polluter represents a "clear and present danger" for the natural or – at least as important – business environment.

#### Comment

The study was made for the request of the Humbold University, Berlin in 1998. Perion Ltd. In the meantime desisted from the idea to build up the recycling factory

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Authors: Ábel Garamhegyi, Department of Marketing and Managemnet,

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