

THE POWER INDUSTRY ON THE ROAD TO 2020, THREATS AND OPPORTUNITIES

Eva Fosby LIVGARD
TNS Gallup Norway
eva.fosby.livgard@tns-gallup.no

ABSTRACT

The aim of this paper is to provide the power industry with a better understanding of consumers' attitudes and actions at a time when major grid investments are due to be launched. In order to reach the EU's ambitious goals for renewable energy, about 600 major grid projects are being planned throughout Europe. Projects of this kind are often met by strong protests from local environmentalists. This generates negative publicity for the power industry, prolonged official treatment and delays in completing the projects. This results in major socio-economic consequences and should be avoided. Both the industry and the authorities rely upon public acceptance of the measures that are needed to uphold the progress of the projects. How can the power industry handle these challenges?

INTRODUCTION

This paper is based on research from the Norwegian market. Data has been collated from quarterly surveys from 1997 onwards, and documents the Norwegian public's attitudes to the power industry over 15 years. Close to 60 000 power customers have been interviewed.

The paper starts with a description of the reputational challenges across the power industry. It then provides an overview of the population's views on current climate policies and the development of renewable energy. It then highlights the opportunities these attitudes offer to the power industry with regards to strengthening its reputation as well as the most important challenges facing the industry among the general public. Finally the paper concludes with a discussion of what the industry can do to enhance and strengthen its reputation.

Norway was one of the first countries in the world to deregulate its power market (1991), and systematic surveys of the consumers' attitudes and actions in the power market were undertaken early on. Other countries could benefit from examining the experiences of the Norwegian market.

THE POWER INDUSTRY'S REPUTATION

The studies of the Norwegian market [1] provide three key findings related to the power industry's reputation; Reputation is mainly affected by price, the power industry has a weak reputation compared to many other

sectors, and the power sector has little to draw on in times of "reputation crisis." This paper focuses on the first point.

There is a clear correlation between the electricity prices customers pay and the power industry's reputation among these customers (correlation -0,845). For the grid activity the relevant factor is the level of the grid fee. For the retail activity, it is more a matter of price variations, i.e. the unpredictability inherent to the power price.

Over the last ten years the power industry's reputation score fell markedly at three different points; in 2003, 2006 and 2010. These falls have all occurred in periods of swiftly increasing power prices (Fig. 1).

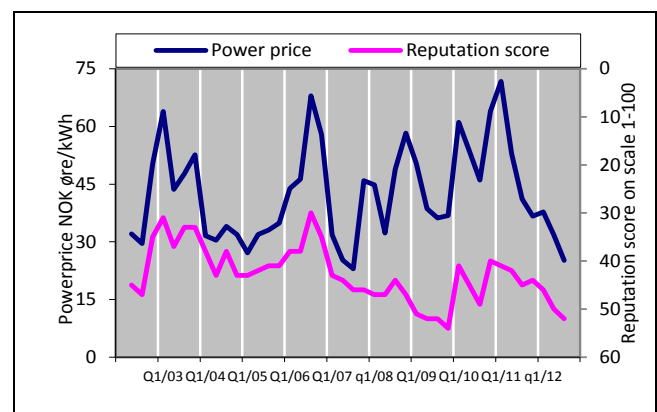


Fig. 1: Development of the power industry's reputation in relation to power price development, 2002 – 2012. Note that the scale for the reputation score is reversed.

From the third quarter of 2008 to the fourth quarter of 2009, the period in which Norway was most afflicted by the financial crisis, the Norwegian power industry's reputation rose steadily, reaching a peak in the fourth quarter of 2009 with 54 out of 100 possible points. Other sectors experienced the opposite development during this period.

From the early days of 2010 onwards, when the crisis was over for most sectors, the power sector's reputation fell. That the power industry maintained a good reputation throughout the financial crisis is likely due to the low energy prices. A weak international economy ensured low prices on oil, gas and coal, since the accessibility of energy was high, and this led to lower power prices in Norway [2]. When the sector's reputation

fell markedly from the start of 2010, it is highly probable that this was due to a similar explanation but reversed; a dry autumn and an exceptionally cold winter incurring high electricity prices since the accessibility of energy was low.

In fig. 1, the blue curve displays power price development, while the red shows the development of the power sector's reputation. When the price increases, the reputation is weakened and vice versa. Approx. 99% of the electricity production in Norway is based on hydropower, which means that the price the customers pay is largely determined by precipitation level and temperatures, but also in politics. This means that the Norwegian power industry's reputation is largely determined by conditions the sector has no means of controlling.

ATTITUDES TO CLIMATE POLICY

This research indicates that the sector's best chance to stabilizing and strengthening its reputation lies in politics. The population's impatience with the government's climate policies and its commitment to renewable energy development is growing [3]. This might be justified; 12 years passed from the introduction of green certificates by the Ministry of Oil and Energy until Norway established a joint electricity certificate market with Sweden from the 1st of January 2012.

Norwegians are discontent with Norwegian climate politics. Despite the population is no longer being as concerned with climate change, the expectations placed on political action remain strong. Six out of ten Norwegians think that Norwegian politicians do too little to limit Norwegian emissions. Even after several years of a highly profiled initiative for the rain forest and climate financing, few (37%) see Norway as a leading climate nation internationally [3].

Norwegians have placed high expectations on many players in the climate debate, and the government being the most important one of these. They place almost as high expectations on the government as they do on the oil sector. Interestingly, there are more respondents who think that the oil sector succeeds with its climate work than there are respondents who think that the government succeeds with its climate work. Among the objections that the population raises around current climate politics is that too little is done to develop renewable energy sources. At the end of 2011, 79% of the population agreed with this view. The share has increased from 59% since 2009, a 20%-points increase over the course of two years.

Positive to developing renewable energy sources

Around 99% of the Norwegian electricity production is

based on hydropower. More than two out of three (67%) think that further development of hydropower is necessary to reach the climate goals. This is also a significant increase from 2009, when the share was 53%. The results also show that Norwegians continually get a better impression of hydropower and onshore wind power. 89% are positive to wind power offshore, 84% to onshore wind power. This is surprising, as the media presents a picture of a population that is critical to measures such as these, especially for those living nearby such projects (NIMBY: Not In My Backyard).

Wind power

A survey TNS Gallup carried out for ENOVA shows the opposite [4]. The sample was split into two groups: one with municipalities where wind power is in the planning stage, and the other with municipalities where the projects have been undertaken. In addition, the results were compared to a nationwide, representative sample of the population. The survey concluded that citizens in the affected municipalities were more positive to wind power than the population in general.

To a larger extent, these respondents see wind power as an important part of Norway's future energy supply, as well as stating that wind power gives the local population something to be proud of and that construction will lead to more jobs in the local community. The results also showed that those who live in municipalities where the wind power projects have been completed are significantly more positive (64%) to more wind power than those who live in municipalities where the projects are still in the planning phase (56%). However, the most striking finding was that 48% of those that can see the facility from their home are positive to more wind power. In municipalities where the facilities are operating the share is 69%. This disproves the traditional view that people are positive to wind power as long as the mills are placed far from their homes (fig. 2).

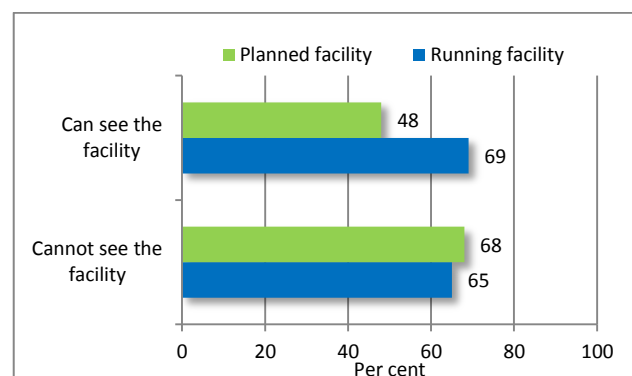


Fig. 2 Question: «Based on your experience (so far) of wind power, are you for or against developing more wind power production in Norway?» (n=2191). Per cent supporting more wind power split by how far the respondent lives from the facility.

Hydropower

In the case of hydropower, 93% of the population state that they have a positive impression of hydropower as an energy source. This result has also received attention, as the myth states that Norwegians oppose hydropower, especially in the 1980s.

Hydropower has been the pillar of the Norwegian energy system throughout history, but from the 1970s onward, development became more controversial. Conflicts surrounding the development of the Alta- and Mardøla watercourses are examples of this. The conflict was between protection interests on the one side, and the government and producers on the other. The Mardøla action in 1970 was the first time civil disobedience was utilised in the struggle against hydropower development in Norway, and the conflict flared up again towards the end of the decade, with the Alta development.

However, an election survey carried out in 1981 shows that the development of the Alta watercourse enjoyed far greater support among the population than what is often assumed. No less than 77% of the nationwide sample agreed to the statement that the Alta watercourse had to be developed (fig. 3). Accordingly, 66% disagreed with stopping the development due to lasting damage to the natural landscape [5]. At the same time, the police removed 500 demonstrators close to the construction site, and several Lapps went on hunger strike for over 20 days in the capital.

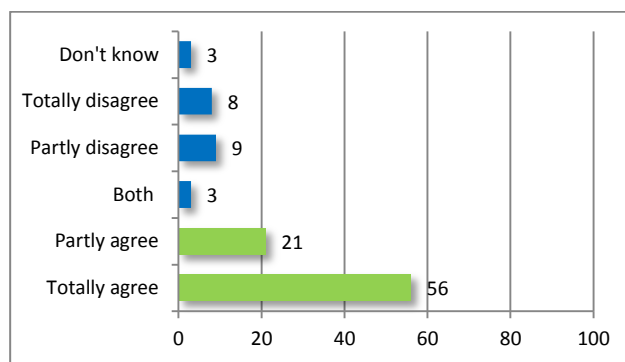


Fig. 3: Election survey 1981: Statement: «The Alta watercourse should be dammed, since power is needed in Finnmark» (n=1596) Per cent.

Grid expansion causes conflict

Norwegians have a good impression of the largest power sources in Norway and the majority want a stronger effort to develop renewable energy. However, such a development means more grids, which often results in protest from those affected. Often small groups make the most noise and receive significant levels of media attention, which can significantly influence political processes.

An example is the 92.3 km long power line from Sima to Samnanger that traverses one of the most attractive tourist areas of Norway. After heavy pressure from the media, local politicians, the tourist industry and environmental activists, the Minister of Oil and Energy chose to undertake a new assessment of the project just weeks before the work was scheduled to start. Opponents to the power line saw this as a temporary victory. However, the data shows that the government had support from the majority of the population in starting the work (55%), which increased further after the government decided to re-evaluate the matter (66%) [1].

The results caused debate among the opponents of the power line, but new data collected in December 2012 consistently shows that 67% of the population accept and understand that the power grid needs expansion and improvement. However, opinions differ on what the goal of the expansion should be. Norwegian grid expansion has two primary goals: strengthening the country's power supply and increasing the production of renewable energy in order to fulfil Norway's international climate commitments. 47% of the consumers think that the grid expansion should be done to secure the country's energy supply, while 48% thinks it should be done to produce more renewable energy in order to limit climate change. No more than 2% of the population categorically reject the need for more grids.

Many positive trends in the population can contribute to strengthening the power industry's reputation, if the sector is able to exploit its opportunities in the right way. At the same time, the industry has many challenges related to its reputation that lay heavy demands on the sector's capability to act.

THREATS TO THE POWER INDUSTRY PRESENT TO 2020

Threat no. 1

The power industry's total reputation, meaning that held toward producers, retail activities and distributors, and the sector as a whole is on a low level. On isolating grid activity, the score is even lower. It is lack of trust in grid activities that holds back the reputation of the power industry [fig. 4]. Since the reputation is mainly based on the price customers pay, the industry will have many challenges to face in coming years. According to Statnett (TSO), up to € 10 billion is to be invested in the grid over the next ten years. Evidence suggests that consumer will have to pay a higher grid fee in the years to come. Thus price, or more precisely price increase for the consumer, will be a challenge for the sector's reputation in coming years.

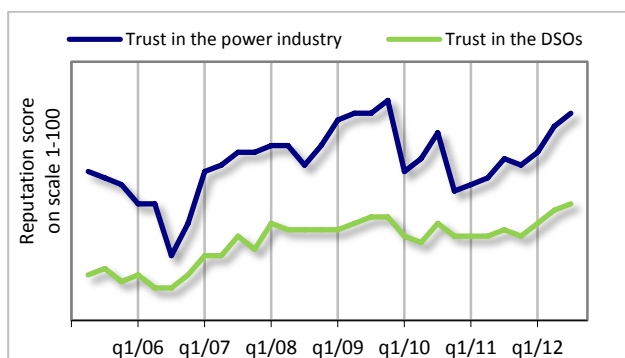


Fig.4: Development of the power sector's reputation overall, and for the grid activity isolated, 2005 -2012, shown as scores on a scale from 1-100. A higher value indicates a stronger reputation.

Threat no. 2

The population is impatient with regards to the commitment on renewable energy. However, increased production of renewable energy requires more grid capacity, and grid expansion often creates conflict with those affected. The grid expansion in Sima-Samnanger shows that a small minority could easily dominate the news picture and heavily influence further political processes. It generates negative publicity for the power sector, prolonged proceedings, delayed completion of projects and as a result major socio-economic consequences. Even if the majority of the population supports grid expansion, the sector may still meet protest. Negative exposure of the sector in relation to new projects might thus have a negative effect on the sector's reputation.

Threat no. 3

Nowadays, fewer think that climate change is man-made. The share has dropped from 74% in 2009 to 65% in 2011. Less attention from politicians, the media, and the fact that climate research continues to be seen as somewhat controversial might have contributed to this.

"Climate change" also falls low on the population's priority list of what they see as Norway's greatest challenges. Climate is now number six. At the same time the issue has plummeted in importance among the youngest, which indicates that this group is more driven by attention from media and politicians [3]. This might indicate that "climate" has weakened in importance as an argument for grid expansion, especially among the youngest. This is disconcerting since these are the power customers of the future. As the opinions of this group appear to be strongly guided by media attention, it might be difficult to create enthusiasm for and involvement in power industry problems as long as the media do not pay attention to the issue. Except for power prices, power- and electricity-related issues are of low interest to most people.

Also, attitudes to the power sector are different in different age groups, where the elderly are most positive to the sector. These respondents have seen the power industry's importance for industrial development and increasing prosperity; they furthermore contribute a positive image of the power industry through their positive review. The younger do not have the same relationship to the sector. As the elderly generation disappears power industry's reputation is likely to fall.

CONCLUSION

The question is how the sector can overcome the challenges in a constructive way; through utilising its potential to increase and strengthen its reputation. Three points are crucial:

Firstly, it is important that the sector is united and communicates an aligned message. This may be difficult due to the various players (producers, distributors and retailers). In relation to the public, it is nevertheless important to appear as a unified sector. This creates trust and credibility.

Secondly, the sector needs to spread information and generate understanding for the sector and frame the conditions it has to deal with. Monitor popular opinion on what may evolve into controversial projects before action groups and the media take a stand on the issue. In that way one will know what views are held by the majority of the population, and therefore the best way in which to communicate to the different stakeholder groups.

Thirdly, the sector needs to play a proactive role and invite stakeholders to dialogue; also, when new projects are launched, it needs to communicate to the public as early as possible. Ensure that the customers have factual and relevant information on what is to be done, why it is to be done, what infringements are necessary, and what this means to those affected (local communities) and to the general public. How the sector is viewed will fundamentally depend on access to information, proactive communication and building ambassadors among key stakeholder groups.

REFERENCES

- [1] TNS Gallup Energy barometer 1997 – 2012
- [2] Reuters EcoWin
- [3] TNS Gallup Climate Barometer 2009 – 2011
- [4] ENOVA Survey carried out by TNS Gallup
- [5] Election survey 1981, cited in Aardal (1993)