Germany: ENERTRAG AG case study

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About

Case study name:
The greening of industries in the EU

Country:
Germany

Organisation Size:
100-499

Sectors:
Energy

ENERTRAG AG is one of the leading suppliers of renewable energy in Germany. Its core business is wind energy. ENERTRAG is an integrated provider, that is, it covers all steps from planning and financing to operating and maintaining wind energy plants. ENERTRAG's headquarters is located in a rural area marked by a declining population, making it especially difficult to recruit suitable employees. The company meets this challenge with a number of innovative measures, ranging from tailor-made training to special incentives for newly recruited employees. The case study was prepared in December 2011.

Introduction

ENERTRAG AG is a European energy supplier specialising in electricity generation from renewable sources – mainly from wind energy but also from biomass. The annual turnover is currently around €250 million. ENERTRAG's headquarters is located in Gut Dauerthal, a small village in Brandenburg, a state in north-east Germany. ENERTRAG was founded in 1992 and has 430 employees.

The total contribution of wind energy to gross domestic product (GDP) is not easily measurable. Indications by the German Association of Wind Energy Suppliers (Bundesverband Windenergie) assume a market volume of around €12 billion in Germany for 2009. The market volume is thus still small (the total GDP in Germany was €2,404 billion in 2009), but growing strongly by an average of 15–20% per year.

ENERTRAG's headquarters is located in a rural area marked by a declining population, making it especially difficult to recruit suitable employees. The company meets this challenge using a number of innovative measures, ranging from tailor-made training to special incentives for newly hired staff.

Drivers and motivations

ENERTRAG was one of the first companies to discover the growing field of supplying electricity from wind energy. When it was founded in 1992, awareness in the general population was still low. The use of electricity from renewable sources was still a niche market, although it was already a profitable one. It can thus be concluded that the main driver for implementing the green business practices was to explore business opportunities.

A central impetus to ENERTRAG's development was the 1991 law regulating the compensation for producers of electricity from renewable sources, further increasing business opportunities in the sector. Another strong period of growth took place after the implementation of the law on renewable energy in the year 2000. This law has made the production of energy from renewable sources even more lucrative by granting providers a specified revenue from provided energy.

The motivation of the company to focus on wind energy (instead of other sources of renewable energy) was made on the basis of the founders' regional provenance in north-east Germany, which is also a prime location for wind energy production.

There was no effect from the recent economic and financial crisis. The stimulus packages did not affect ENERTRAG because they were not aimed at supporting the development of renewable energies.

Green business practices

Green business practices are at the core of ENERTRAG's business model. The provision of wind energy and the planning and building of hybrid power plants are its main business activity. Today, ENERTRAG has 460 installed wind turbines producing 1.6 billion kilowatt hours of electricity per year. This represents a market share of 4.3% of the German production of wind energy, which in turn makes up 6.7% of total electricity supply.

The company can be considered as a full service provider, offering services ranging from planning, technical development and financing (via its own financial service provider responsible for selling shares and managed funds to investors) to constructing and operating wind power plants.

The green business practices at the core of the business model have increased ENERTRAG's awareness of the local economic structures and their sustainability. ENERTRAG is committed to creating a sustainable economic structure in its region by supporting cultural, ecological and political activities in order to increase the attractiveness of the region.

Anticipation and management of the impact of green change on quantity and quality of jobs

Effects on quantity of jobs

ENERTRAG's workforce is composed of technical (mainly engineers and some engineering technicians) and some non-technical professions (mainly business managers, accountants, etc.), with the technical professions being more important than the non-technical ones. Since ENERTRAG is a full service provider, it needs a large number of different skills for the different parts of the group. However, its core business and the part for which employment demand is largest, is the engineering sector.

The growth in the overall number of employees was strong over the past years (annual growth rates of around 10%) and is expected to remain strong during the years to come. However, employment growth in the future will be stronger in subsidiaries in other European countries. This is partly due to the stronger growth of the industry in these countries, but also to the increasing difficulties of finding suitable apprentices and employees in Germany. However, no jobs have been lost in Germany so far.

Due to its location and the strong growth of the renewable energy sector in Germany overall, ENERTRAG has, despite its attractive apprenticeship programmes and work opportunities, experienced difficulties finding suitable apprentices, trainees and employees, especially for technical jobs (for administrative jobs, the problem is less important because the demand/supply ratio is less problematic on the labour market). Therefore, ENERTRAG has developed an array of measures aimed at assessing qualifications, attracting skilled labour and providing good working conditions in order to keep employee fluctuations low. Examples are mentioned below.

Effects on quality of jobs

Managing skills development

As the renewable energy sector is a relatively new and rapidly growing area in the German economy, there are almost no recognised trades in the sector. Since the German vocational education system is strongly based on recognised trades and specific occupations, there are very few apprenticeships preparing people specifically for work in the renewable energy sector (apart from some new occupations in the field of solar energy).

The same holds for the tertiary education sector. Although universities have started to implement specific study paths (such as renewable energies engineering) preparing for employment in the renewable energy sector, the number of available places is still significantly below the demand by companies. Therefore, the number of graduates is still too low to cover the needs of the green economy in Germany. This makes recruitment a particular challenge to all companies operating in the sector and makes it necessary to recruit people with 'traditional' qualifications and provide additional training within the company.

More specifically, ENERTRAG estimates that only 10% of its employees (mainly engineers) have completed some kind of training or education that is particularly targeted at work in the renewable energy sector or have prior work experience in that sector. Most of these 10% of employees have completed a tertiary education, that is, they have at least a bachelor degree from a university. For the other 90%, ENERTRAG has to provide specific internal training, focusing on the (mainly technical) specifics of wind energy production. ENERTRAG considers this internal training especially important for new employees who have completed a technology-oriented initial vocational education but who do not have work experience in the sector. For the mercantile occupations within the company, specific training is considered to be less important because the business-related management of wind energy projects is not significantly different from project management in other fields.

The company implements a number of measures aimed at anticipating and managing skills development of its staff.

- ENERTRAG has a systematic approach to analysing future skills needs. It regularly updates information on the age distribution among its employees in order to detect replacement (due to retiring employees) and expansion (due to new or increased business activity) demands and to set up training activities accordingly. The human resource management (HRM) department is currently planning future skill needs over a period of several years. It does this by collaborating with the departments planning new wind energy production facilities and by estimating the skills demand arising from these activities, differentiated between different qualification and occupation groups.
- Early vocational orientation: ENERTRAG cooperates with many regional schools – primary as well as secondary. For younger children, ENERTRAG offers activities that communicate the benefits of green energy to children. For young adults at the end of their secondary schooling, ENERTRAG offers information days and internships. This measure is aimed at attracting new employees and apprentices.
- Vocational education and training: Currently, 21 apprentices are working with ENERTRAG. Due to its location, which is difficult to reach, most of these apprentices are more than 18-years-old, which is generally uncommon in the German apprenticeship system. Most of the apprentices are hired as employees when they have successfully completed their vocational training. In addition, close contact is kept with those who wish to participate in a university programme after their vocational education in order to attract them back to work for ENERTRAG at a later date.

- Tertiary education: ENERTRAG cooperates with the bbw University of Applied Sciences in Berlin (bbw Akademie für Betriebswirtschaftliche Weiterbildung GmbH), which recently opened a branch in Prenzlau, a town close to ENERTRAG's headquarters. Together with this university, ENERTRAG has developed a new study programme, 'Engineering with a Focus on Renewable Energies', leading to a bachelor degree in engineering. A unique feature of this programme is that it can be undertaken part-time. This makes it possible for ENERTRAG employees who have already completed vocational education to participate in the programme. ENERTRAG covers part of the tuition fees and encourages participation in the courses. Currently, seven employees are participating in the study programme.
- Internal training: For new employees in technical occupations who have no work experience in the renewable energy sector, there is a specific training programme with several 2–3 day cycles when they begin work. During this programme, new staff get to know all departments of the company, with a focus on the planning and service/maintenance units. The aim of this programme is to acquaint new staff with the sector specifics.
- Continuing vocational training: ENERTRAG supports its employees' continuing vocational training activities by giving them the opportunity to participate in different programmes in different regions of Germany. A specialised continuing programme for people with a completed vocational training, a 'Meisterausbildung', specifically designed for the area of renewable energies is offered in Bremerhaven by an external training provider (BFE Bremerhaven). ENERTRAG regularly supports the participation of its employees in these programmes by covering their tuition fees. Occasionally, the company also cooperates with the regional employment agency, especially in the field of continuing vocational training (for example, by recommending suitable training providers to the agency).
- ENERTRAG offers many possibilities for potential job candidates to experience the company and to check whether employment at ENERTRAG is suitable for them. These include open days, internships of different length and quality, and the possibility of talking to ENERTRAG representatives at various job fairs.

Effects on other dimensions of job quality

The impact of ENERTRAG's business model on other job quality dimensions is positive. The business model leads to demand in occupations that require formal training and which are normally well paid. Moreover, there is generally no exposure to pollution, exceptional levels of noise or other sources of physical stress.

Since ENERTRAG is based in a rural region, many employees working in Gut Dauerthal have to make long commutes every day or to go home for the weekend. Only 25% of ENERTRAG's employees live within a radius of 20 km of the workplace. Around 15% of its employees live in Berlin, which is means a journey of more than 100 km between home and work, and a commute of at least 90 minutes. Another significant proportion of employees (around 30%) lives in the area during the week and goes home for weekends, making commutes of two hours or more. To tackle this issue, the company has implemented a number of measures.

- ENERTRAG provides a free bus shuttle between the train station in Prenzlau and its headquarters. This is important for those employees who do not own a car.
- ENERTRAG offers financial support to kindergartens in the region around its headquarters, ensuring that there are enough places available for the children of its employees. This improves quality of life for employees living in the region and makes it more attractive to move there.
- ENERTRAG also sponsors numerous cultural and sports activities (theatre in summer, football matches) in the region in order to increase the general attractiveness of the area to residents and new employees.
- Within a network of companies in the region, ENERTRAG offers placement services to spouses of new employees and, in turn, helps other companies to do the same.

Conclusions and recommendations

This case study has shown that implementing green business practices, especially the provision of renewable energy, may cause challenges for the companies operating in the sector. This is because the German vocational and tertiary education system does not have sufficiently developed programmes or study paths specifically preparing people for employment in the sector. Moreover, most providers of renewable energy (especially wind energy) are located in sparsely populated areas where recruitment is particularly difficult.

In the case of ENERTRAG, these challenges have led to creative solutions both in terms of recruitment and in terms of training and education. ENERTRAG cooperates actively with schools and universities, offers different kinds of services to new employees, and encourages participation in continuing vocational training activities.

Other companies could adopt the following elements of the strategy.

- If no suitable qualifications are available on the labour market, companies can react by designing specific programmes with providers of continuing vocational education. Often, these organisations are eager to explore new business opportunities for themselves.
- Companies can improve their standing by helping employees to cope with the problems of long commutes, for example, by supplying housing in the region, making free shuttle buses available, and so on. As this requires a significant investment by individual companies, companies can form teams with others in the same region and create employer networks.
- The case study has highlighted how important it is to create a good company image by supporting cultural and sports events, and by presenting the company to school leavers early enough to influence their career choice.

The large number of activities has enabled ENERTRAG to meet its skills needs during the past few years. For the future, growth will be larger in other ENERTRAG locations outside Germany, but expansion and replacement demand together will continue to be a challenge to human resource management at the company.

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