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Poland: HOCHTIEF Development Poland (HDP) case study

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About	
Case study name: The greening of industries in the EU	
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The construction and real estate industries and use of property are responsible for a significant share of CO2 emissions and energy consumption in Europe, so it is expected that the introduction of environmental norms and standards will have consequences for these sectors. Thus, an analysis of the environmental certification of an existing building, which is one of the largest office buildings in central and eastern Europe, allows the identification of the consequences of such processes for the quantity and quality of jobs in HOCHTIEF Development Poland Ltd (HDP). HDP is a real estate management company that has been managing this property and implemented necessary modifications that were required in order to obtain the LEED Gold certificate. The company analysed is one of the most experienced in the field of environmental certification in Poland, thus this case can provide a valuable insight for other organisations considering green certification of an existing building, as well as for social partners and economic authorities.

Introduction

HOCHTIEF Development Poland (HDP) Ltd, based in Warsaw, is a company specialised in the field of construction services and property management. Founded in 1998, the company is mainly involved in office and retail projects, currently employs 28 workers and provides professional services of planning, financing, purchasing and leasing of real estate, construction project management, renting, marketing and property management.

In February 2011, the Rondo 1 office complex in Warsaw, the first skyscraper in Europe with more than one tenant, managed by HDP, received the LEED Gold certification (Leadership in Energy & Environmental Design) in the category 'Existing buildings'. Rondo 1 is the most modern high-rise building of an A+ class in central and eastern Europe. The 40-storey tower is located in the heart of Warsaw's business district, at the United Nations Roundabout. The complex also includes a neighbouring 10-storey building where a car park and shopping area are located. Rondo 1 offers a total of 65,000 m² of leasable space and nearly 500 parking spaces with more than 70 companies and institutions, employing a total of about 4,500 people. The project was completed in 2006. Rondo 1 is owned by the fund MGPA Europe Fund II, managed by private equity fund MGPA.

Implementing new environment friendly solutions and policies in Rondo 1 to achieve the certification took more than a year. The certification by the US Green Building Council (USGBC) included assessment of environmental solutions in the consumption of electricity, water, heating and ventilation, maintenance, waste disposal, the inclusion of tenants in the activities for environmental protection and many other design-related arrangements. The impact of the certification process on the quantity and quality of jobs in HOCHTIEF Development Poland Ltd is the main subject of this report.

Drivers and motivations

The decision to launch the LEED certification of Rondo 1 was taken by its owner, private equity fund MGPA. According to the representatives of HDP, green certification of high-class office buildings is becoming a standard in the Warsaw market and almost a prerequisite for winning attractive tenants. It is also an important factor affecting the value of the property in the event of its sale. Another important motivation was to create the image for Rondo 1 of being a leader in its class that cares about the highest quality of property offered to tenants and about the environment. A feasibility study on green certification carried out in cooperation with external consultants in 2009 concluded that the US Green Building Council (USGBC) standard should be chosen.

It should be also noted that even at the design stage of Rondo 1 in 2000/2001 one of the priorities was to ensure high energy efficiency and a low cost of operation. However, there was no reference to any specific environmental standards, except for compliance with demands of the Polish construction standards. The certification process helped to further reduce the operating costs of the building.

Green business practices

The LEED Existing Building certification process, which began in October 2009, covered three main areas: Technology' (installations and equipment in the building), 'Cleaning and disposal of waste' and 'Tenant'. In the area of 'Technology', the following solutions aiming at reduction of CO₂ emissions through lower electricity consumption were introduced: an effective monitoring and lighting control system that allows lighting schedules to be set and automatically collects information about any problems with lamps and components of the system (savings of approximately 25%); an extensive system of metering and control of the media consumption, which helped to reduce the need for conventional power supply (20% savings); the use of bulbs with reduced mercury content throughout the building and of LED lamps in the elevators. In addition, it was decided to purchase electricity from the supplier that guaranteed the origin of 10% energy from renewable sources. In the same area of 'Technology' a number of heating management solutions have been implemented: the car park heating system using the air extracted from the building; a centrally controlled system of automatic blinds; a system of recuperators and temperature management. The Technology' area also includes features to reduce water consumption, which fell by 31.5% through the use of the following solutions: two-phase toilet flushing system, installation of aerators on taps, automatic plant watering system and planting green roofs with plants that do not need watering. Other solutions in the area of 'Technology' dealt with the installation of regeneration systems in 90% of elevators, which enables recovery of energy during their movement. An automatic monitoring system reports any damage to equipment in the building and the double filter air humidity/ventilation/conditioning systems use only environmentally friendly gases in their refrigeration systems.

In the area of 'Cleaning and waste disposal' the effective and environmentally friendly maintenance, cleaning, disinfection and green management of waste programmes were implemented. Standard operating procedures for cleaning programmes were introduced to ensure effective and environmentally friendly cleaning. These procedures include the purchase of environmentally friendly equipment and products for cleaning and maintenance; training of cleaning personnel in the use, storage and recycling of chemicals; introduction of rules for safe use and storage of cleaning chemicals, including an action plan in the event of spillage of hazardous substances; obligation to communicate regularly with the tenants about the green products and initiatives to maintain cleanliness and hygiene. In terms of waste management, an agreement was concluded with an external partner who offered an advanced waste sorting and recycling system. As a result, approximately 44% of all waste is segregated by the tenants, and a further 20% is segregated and recycled by the contracted external company.

The third area of certification aimed at involving tenants in the greening processes initiated by the property owner and property manager. The first category of activities in this area concerned the increase in environmental awareness and sustainable development issues with tenants. To this end, a number of communication actions were undertaken. For example, a green newsletter was published on the multimedia monitors in the Rondo 1 corridors; eco stickers were placed on the electrical equipment in the building; information was provided about providers offering environmentally friendly office supplies; brochures on ways to save energy at work and at home were distributed, and many ecological actions targeted at tenants and their employees were organised in the building. In addition, 40 underground parking places for bicycles were created; the smoking rooms were fitted with an air ioniser; and vending machines selling healthy products (such as fresh juices) were installed. Individualised sample calculations of the financial benefits resulting from the use of green solutions by tenants were developed and distributed among tenants. These calculations highlighted the benefits of the system of free collection of waste paper, printing on both sides, the use of re-usable packaging and of intelligent lighting and temperature management systems. Finally, all tenants were obliged to buy only environmentally certified furniture and equipment when decorating their interiors (LEED for carpets, FSC for furniture and StarEnergy for electrical equipment).

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

Impact on quantity of jobs

About 15 HDP employees, mainly in professional and managerial positions (Project Developer/Manager) were involved in the certification activities. Additionally, this process involved a much larger number of staff employed by companies providing cleaning, security and other auxiliary services in the building under the direction and supervision of HDP. As a result, the certification process has had a direct impact on the work of about 90 people employed in the management and maintenance of Rondo 1. About 4,500 employees of the tenants were also indirectly involved in the certification, through different initiatives and programmes launched by HDP, e.g. promoting responsible purchases of environmentally friendly materials and services and resource-efficient use of the equipment and installations in the building. All these jobs can be said to have been transformed to various degrees to become greener. However, in terms of net job creation in connection with the certification in both HDP and in the contracted companies providing services under its supervision, this amounts to two new employees working half-time for a period of three years hired to take care of the newly established gardens on the roof. Moreover, according to HDP representatives, no jobs were replaced or lost in connection with the certification process.

It has to be noted, however that numerous adaptations, new installations and systems in the building linked to the LEED EB certification have generated demand for labour and skills in external companies – suppliers of these equipment and services. Similarly, demand for labour and skills was generated in the USGBC-accredited consulting companies that provided guidance and support to HDP throughout the certification process. Analysis of these effects, which emerge at different stages of the value chain, goes beyond the scope of this report.

Impact on quality of jobs

The certification process involved a series of training and information campaigns organised in cooperation with specialised, accredited certification bodies and consultancy firms, aimed at raising the level of knowledge and skills, in the first place, of executives and managers of HDP. About eight white-collar employees of HDP were seconded to the preparation and implementation of the certification process. Training sessions and conferences have taken place over two years for the eight HDP professionals and managers taking part. Moreover, after completion of the certification process, these eight HDP employees participated in conferences and workshops on the greening-related issues. A much larger group of low- and medium-skilled employees, performing work related to maintenance, cleaning, monitoring and security in the building, has been trained and gained new knowledge and skills in connection with the certification process.

It is worth mentioning that activities related to LEED EB certification have also impacted the level of knowledge and skills concerning

environmental practices in the professional and private lives of more than 4,500 people who work in the building. Information on topics such as energy-efficient use of facilities and installations in the office and building, healthy eating and sustainable ways of commuting to work has been disseminated regularly with the cooperation of HDP and tenants and in the form of communication campaigns in Rondo 1.

According to the representatives of HDP, the LEED certification process has not contributed significantly to change in other dimensions of quality of work and employment, i.e. financial conditions, employment security and career development and the balance between work and private life. The only exception has been a positive impact on some aspects of health and safety for workers having direct contact with chemicals used for cleaning and maintenance in the building and the positive impact of modern solutions for control of lighting, air conditioning and ventilation on the health of all people working in the building.

In addition, it seems that at least for a few highly skilled employees directly involved in the LEED EB certification process on behalf of HDP, their position in the market for property management professionals has been strengthened as a result of acquired knowledge and experience. This should translate into greater opportunities for career development as the green certification of buildings becomes more common in Poland and other European countries.

Cooperation with third parties

When implementing the decision by Rondo 1's owner to certify the building HPD cooperated with several specialised consulting companies, both Polish and foreign, accredited by the USGBC. It had not, however, collaborated or received any support from the local authorities, government or the social partners.

Conclusions and recommendations

The process of environmental certification of an existing office complex described above included the implementation of new and upgraded solutions in several systems in the building and in its maintenance. In addition, there were information campaigns and training on the principles of energy-efficient and environmentally friendly operation of equipment, and systems were provided for all tenants and their employees working in the building on the principles of energy-efficient and environmentally friendly operation of equipment and systems. This has resulted in a remarkable reduction in electricity and water consumption and a reduction of waste disposal. Several specialists from the company managing Rondo 1, who were directly involved in the certification process, have benefited from a more extensive training and learning-by-doing experience. The implications of the certification for both the number of jobs created and for other aspects of working conditions remain, however, very limited for the rest of HDP's staff and the employees of contracted service providers in the building. In the opinion of representatives of HDP, the introduction of various forms of public support, such as tax breaks, reduced payments for the lease of land and subsidies for the purchase of bicycles for employees wishing to change their mode of transport to a more environmentally friendly one, could help to facilitate the process of the green certification of buildings and to spread their positive consequences for the natural and working environment. It also appears that the active support of the social partners and educational and training institutions would be of value to companies that are pioneers in introducing green building certification.

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