Realised project indoor lighting: Tennishalle Ried, Upper Austria

Project background and objectives

Fischer UTC, with 600 members, is one of the largest and longest-standing tennis clubs in Upper Austria. The tennis club offers its members 8 exterior tennis courts and 4 interior courts in its hall.

The tennis hall was built in 1992. However, over the years, the lighting system had become increasingly failure-prone – sometimes the lighting would even fail during a match. As the club is committed to its members' satisfaction, the decision was made to renovate the lighting system.

Project description

The planning for the renovation of the lighting system started in spring 2015. Implementation had to be carried out quickly as the tennis courts had to be ready for championships in September. The main priorities for the new lighting system were: best illumination of the courts, no interruptions in lighting and reduction of maintenance and electricity costs.

Tennis halls lighting systems need to fulfil particular requirements and luminaires need to be robust enough to withhold the impact of a tennis ball. At the time of the project, as there was no suitable LED solution for this tennis hall's requirements on the market, efficient fluorescent lamps were used.

The tennis club compared several ESCOs and decided to develop the EPC contract with the local electrician who had done maintenance work in the hall before. This was his first EPC project.



Facts

- Company name: Fischer UTC Tennis hall in Ried
- Type of lighting: Indoor lighting in a tennis hall
- ESCO: Gadermeier
- Electricity cost savings: 4,300 €/year
- Maintenance cost savings: 1,300 €/year (not guaranteed in the EPC contract)
- Reduction electricity consumption: 26,200 kWh/year
- CO2 reduction: 10 tons/year
- Investment costs:
 - 60,100 € (total investment)
 - 29,900 € (financed by EPC)
- Subsidies:
 - 4,600 € (regional contracting programme) (additionally, the project was subsidised by several sport related programmes)
- **EPC contract duration:** 7 years

Further information:

OÖ Energiesparverband A-4020 Linz, Landstrasse 45 Telephone: +43-732-7720-14380 E-mail: office@esv.or.at





Realised project indoor lighting: Tennishalle Ried, Upper Austria

Streetlight data of the project	Before renovation	After renovation
Total installed electric capacity	31 kW	24 kW
Number of lighting points (luminaires)	480	288
Main lamp type	Fluorescent lamps (58 W each) with low- loss ballasts	Fluorescent lamps (80 W each) with electronic ballasts
Annual electricity consumption	44,200 kWh	18,000 kWh
Annual electricity costs	7,200 Euro	2,900 Euro

Results

Tennis halls have a high potential for lighting renovation. Due to the ceiling height, a crane is often needed to exchange lamps – this is expensive and disturbs the hall's operation. A lighting system that requires low maintenance is therefore very important. For this project, since implementation had to take place very quickly, the new lighting system was installed in only 2 weeks.

The tennis club is very happy with the achieved results. The estimated energy savings have been achieved and the maintenance requirements have been significantly reduced. The chairman of the tennis club is also satisfied and emphasises that thorough project planning pays off.

Support by the facilitation service

As this was the first EPC project for the ESCO, support from the facilitation service was necessary and highly appreciated. Neither the ESCO nor the chairman of the tennis club were experienced with the EPC model and therefore contacted the facilitation service several times for guidance and support.



Before renovation

After renovation

This case study was developed in the context of the EU-Project Streetlight-EPC which is supported by the Intelligent Energy Europe Programme. The sole responsibility for the content lies with the authors. It does not represent the opinion of the European Communities. The European Commission is not responsible for any use that may be made of the information contained therein.

Fotos: UTC-Fischer, pixabay



inded by the Intelligent Energy Europe ramme of the European Union

www.streetlight-epc.eu

