



# University of Applied Sciences Munich



## Project Profile

The University of Applied Sciences Munich and the Energy Service Company (ESCO) of Johnson Controls entered into an energy performance contract (EPC) for both of the buildings on the university's campus in Munich-Pasing with a total EPC volume of € 1.1 m. The university was founded in 1971 and is the largest university of applied sciences in Bavaria, with approximately 17,800 students, 500 professors, 750 lecturers and 660 non-academic staff.

The ESCO and the university agreed to energy efficiency measures comprising the optimization of the heating, lighting, metering, building management and pumping as well as the installation of a 49.5 kW combined heat and power (CHP) plant.

The project was implemented in 2013, and in 2014 it achieved an annual reduction of 48 (t) of CO<sub>2</sub>e emissions and 1,396 MWh of primary energy savings.

The cumulative savings of the projects to the end of 2014 are 59 (t) of CO<sub>2</sub>e emissions and 3,137 MWh of primary energy savings.

The ESCO has guaranteed the university the energy savings per annum and is completing maintenance and building operation services for a 10 year contract period.

Key figures	
Country	Germany
Sector	Energy efficiency – building retrofit
Type of investment	Forfeiting loan
Total project size (€ m)	1.1
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Financial Close	31 November 2012
Maturity	10 years
Observed (t) CO <sub>2</sub> e emission savings (p. a.)	48

## Project Highlights

This constitutes an innovative forfeiting structure for financing energy efficiency measures in a further public building with a focus on low carbon solutions which will improve the learning environment for the students as well as staff. Although it is a smaller project, it demonstrates the concept of combating climate change through a smarter use of energy which also benefits the public budget. It even includes a small component of decentralized energy production for the university's own use.

This project can serve as a role model for further energy efficiency investments in educational facilities such as universities, schools and kindergartens.