

## Best Practice

### Automotive OEM - Ventilation

A large German automobile producer with multiple production facilities throughout Germany operates a many older ventilation systems, which were in desperate need of being optimized for energy efficiency. The challenge in this case, was that the retrofit work had to for the most part take place during ongoing production in the factories, as demand for new cars simply did not allow for production downtime.

*saved 43%*

#### geff Modules applied in this project

visualization +	Complete analysis of the system including actual versus target performance comparisons for the equipment
ventilation +	Replacement of obsolete ventilators with 330 new high-efficiency centrifugal fans
	Adjustment of air flow volumes
	Deinstallation of obsolete motors and installation of new high-efficiency motors
control +	Installation of frequency inverters and demand-response controls for the ventilation equipment

#### Results

Power demand <b>before geff</b> (per year)	106,149,320	kWh per year
Power demand <b>after geff</b> (per year)	60,985,004	kWh per year
<b>Savings</b>	<b>45,164,316</b>	<b>kWh per year</b>
<small>calculated at 0.1134 Euro per kWh and converted to USD at the 2013 yearly IRS exchange rate of \$1 = 0.783 Euro</small>	<b>6,541,038</b>	<b>\$ per year</b>



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