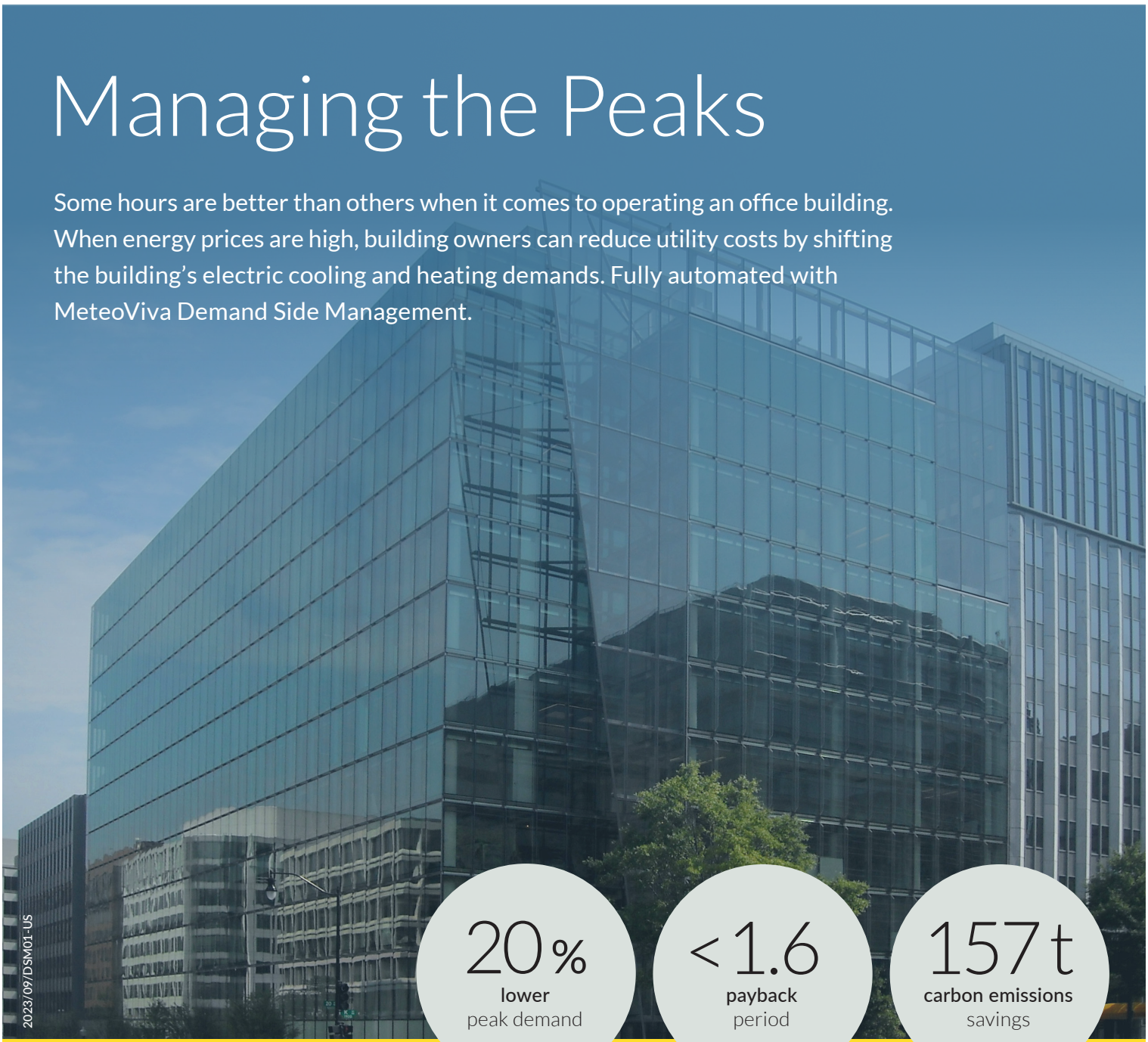
MeteoViva
Smarten Up Your Building

Managing the Peaks

Some hours are better than others when it comes to operating an office building. When energy prices are high, building owners can reduce utility costs by shifting the building's electric cooling and heating demands. Fully automated with MeteoViva Demand Side Management.



2023/09/DSM01-US

20 % lower peak demand

< 1.6 payback period

157 t carbon emissions savings

Challenge

Achieve significant energy savings and peak demand reductions of an all-electric building while maintaining or improving tenant comfort.

Solution

MeteoViva's Smart Data Technology with Demand Side Management to optimize peak electricity demand with energy efficiency.

„MeteoViva has significantly reduced our carbon footprint, improved our tenant's indoor comfort, and made our property more sustainable and cost-effective. We are extremely satisfied with our investment."

Enda Bracken, Senior Vice President
Deka Immobilien, Real Estate Management USA

Case Study: Demand Side Management

1999 K St NW, Washington DC

With more and more commercial buildings going all-electric, it has become critical to reduce and avoid peak power consumption, while at the same time ensuring indoor comfort for tenants at all times. MeteoViva balances all these factors.

Reduced peak electricity demand

Energy is becoming a strategic factor in competitive markets. This also applies to the real estate sector and MeteoViva's client Deka Immobilien. For Deka's K Street office building in Washington DC, MeteoViva was asked not only to improve the building's carbon footprint through energy-efficient operation, but also to shift electricity consumption for heating and cooling to off-peak hours, thereby reducing overall electricity costs. To achieve this, MeteoViva uses its MeteoViva Climate and MeteoViva Demand Side Management solutions.

Using predictive models, MeteoViva can optimize and shift demand using preheating and precooling strategies to flatten the demand profile without sacrificing comfort. As a result, peak demand was reduced by 20 %, and energy costs and carbon emissions were reduced by 27 % in the first year of operation.

Improved indoor comfort

MeteoViva's predictive and proactive building operation ensures improved indoor comfort, significantly reducing the average degree-hours that zones are „too hot" by 33 % and „too cold" by 45 %. In addition, the 24/7 monitoring allows for the detection of faults before they affect the indoor climate, resulting in a consistently pleasant work space for tenants.

MeteoViva Climate and Demand Side Management

On average, 15 % to 45 % of indoor climate-related energy costs can be saved through the use of innovative smart data technology.

Incentive to save energy

Deka and MeteoViva greatly appreciate the generous contribution from the Washington DCSEU, who, based on the achieved savings, provided incentives to complete the project.

„Our partnership with MeteoViva and Deka has been exemplary of how DCSEU champions energy efficiency. With our incentives, we accelerate the adoption of innovative technologies for a sustainable future."

Alexandru Maracineanu, Lead Engineering Consultant Washington DCSEU

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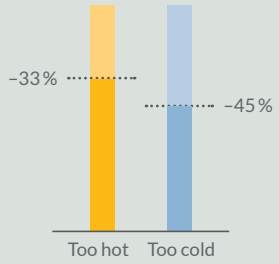

Building facts

Area: 272,069 ft²

Type: 12-stories office building in Washington, DC

Equipment: all-electric, mechanical chillers with cooling towers, two air handling units with cooling coils, fan-powered boxes with electric heating coils.

Customer

Deka Immobilien is the specialist for real estate investments within the Deka Group and is one of the largest globally active real estate fund companies in Germany.