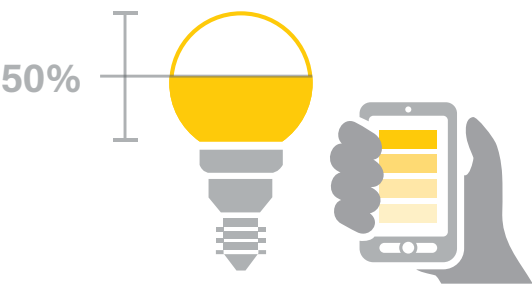




How can Minnesotans improve their light levels and save on cost?

Turn down the lights

RESEARCH IN MIDWESTERN STATES SHOWS that Light-Emitting Diode (LED)-lit spaces in commercial **BUILDINGS ARE OFTEN OVER-LIT**, making occupants unhappy and increasing energy use.



TASK TUNING ENHANCES LIGHT LEVELS in commercial buildings with dimmable LEDs and controls. **This allows for light level adjustment in existing overlit spaces, saving electrical energy.** Currently, not many Minnesota buildings have task-tuned lighting systems.

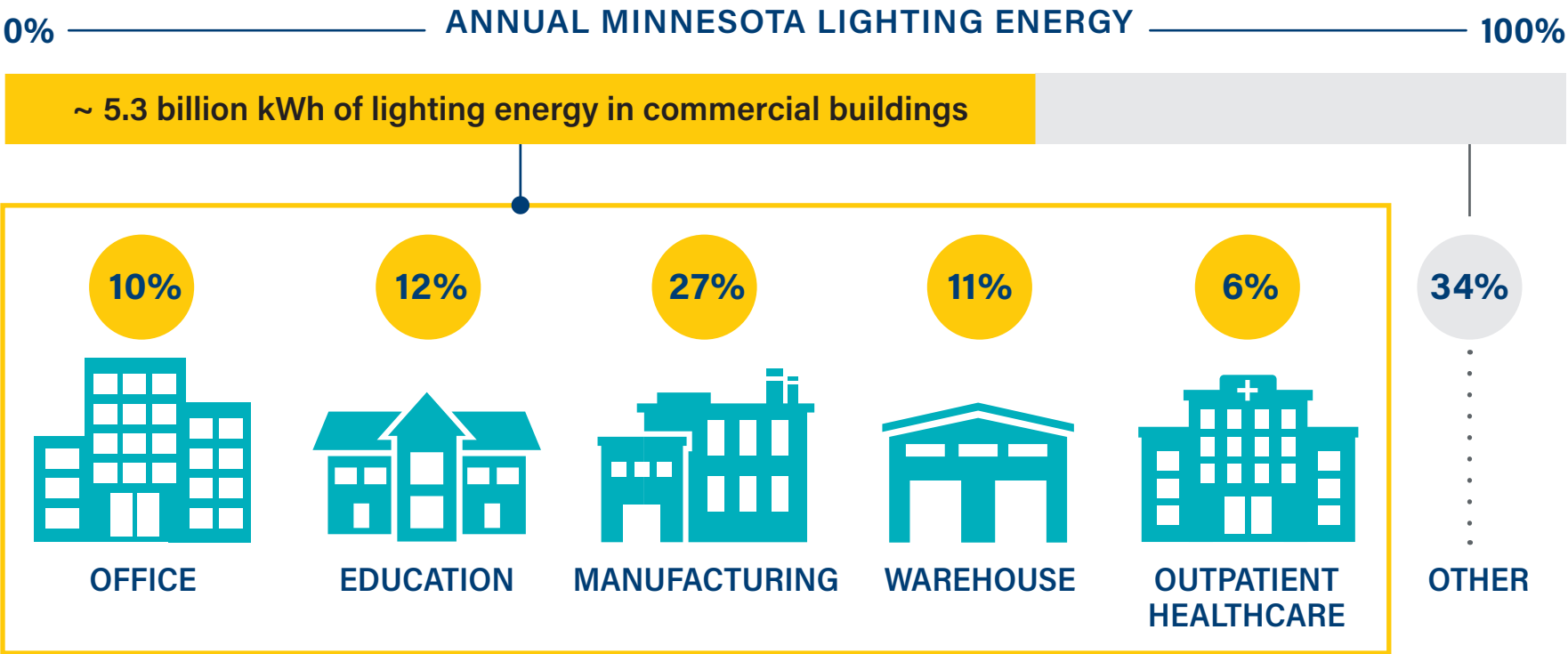


TASK TUNING IS COST EFFECTIVE when implemented in **new construction or major renovation projects where a dimming system is already planned as part of the lighting design.** Existing facilities that have a dimming system can also achieve cost-effective savings by implementing task tuning.

Lighting energy use in Minnesota buildings

SLIPSTREAM MEASURED LIGHT LEVELS in a representative sample of Minnesota businesses and quantified the potential for **energy savings from optimizing light levels.**

Commercial and manufacturing buildings in **MINNESOTA USE APPROXIMATELY 5.3 BILLION kWh OF LIGHTING ENERGY ANNUALLY.** Five building types comprise approximately **two-thirds of the lighting energy.**



Results



FOR ALL SPACE TYPES, THE MEAN ILLUMINANCE WAS HIGHER THAN THE IES RECOMMENDATION.

In total, we estimate that adjusting light levels could potentially **SAVE MINNESOTA APPROXIMATELY 167,000 MEGAWATT HOURS (MWH) ANNUALLY**, with most of these savings coming from the office and education sector.

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