

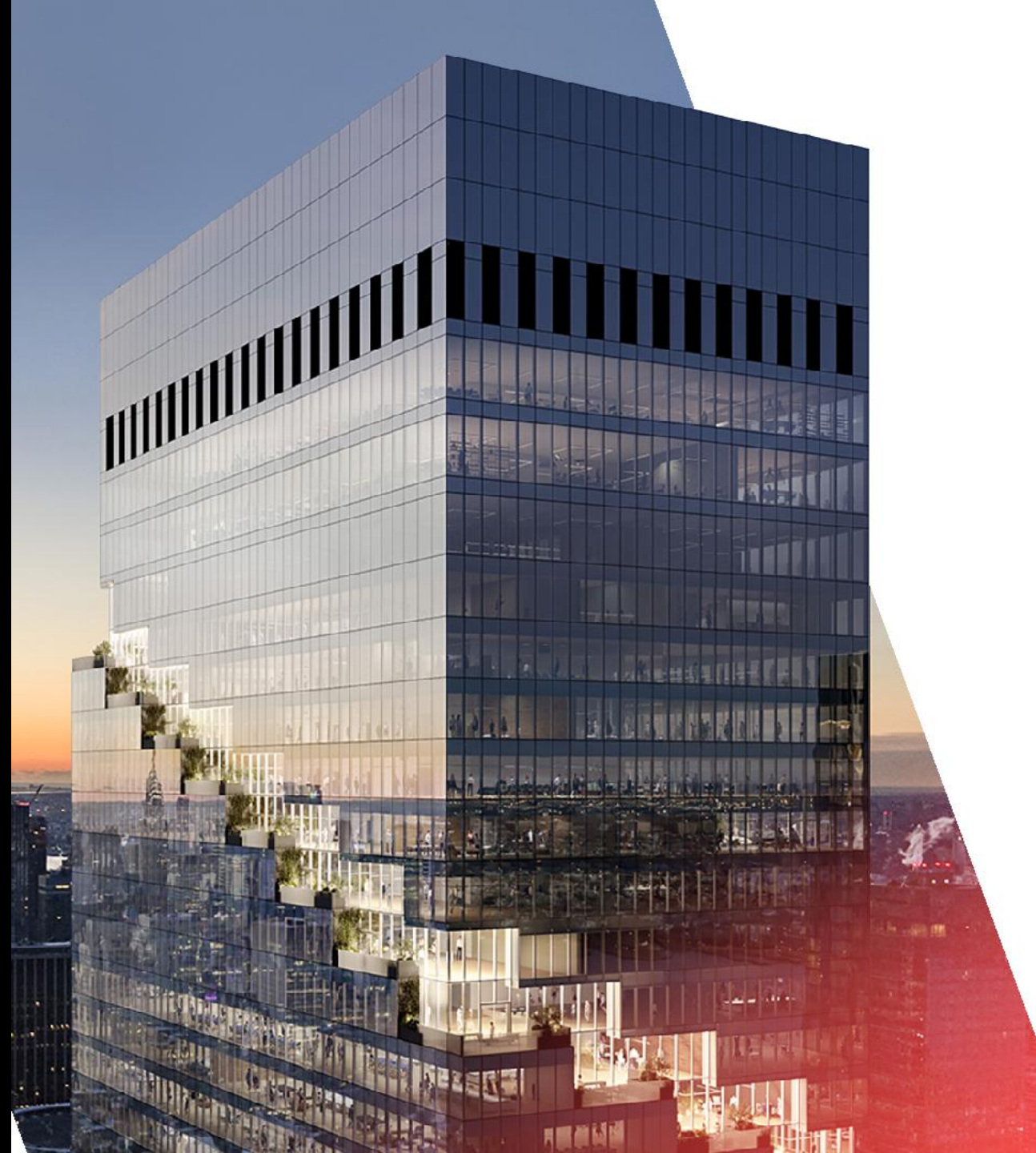


LESSONS LEARNED THE HARD WAY

COMMUNICATION, CONTROLS AND COMPLEXITY

LESSONS FROM 20 YEARS OF NABERS
PROJECTS

Chris Killoran | August 2026



Who am I

- Mechanical HVAC design
- Energy modelling and ESD consulting
- NABERS Assessments on operational buildings
- NABERS Audits to check other Assessors
- NABERS Independent Design Review Panel



Communication

If it isn't specified, it doesn't matter

- COP
- Fan and pump efficiency/max absorbed power
- PV system details

2 way communication to modeller

- Metering
- Recording data
- Letting people know
- Listening to feedback

Controls

Building is at part load 99% of the time

- Has part load operation been considered?
- Has low load operation been considered?
- Is the control important to work properly or efficiently?
- Is the control actually specified?

Commonly overlooked

- Economy cycle
- Chiller staging
- Central heating vs local

Complexity

Simple done well is better than complex not thought through

- Understand systems, make sure others understand them too
- Too many complex systems – how will they interact?

Common causes

Avoiding common mistakes

- Mistakes usually happen just outside our specialty
- Gaps between disciplines, or edge of your discipline
- Look at the areas you are unsure of, consult with others



THANK YOU

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