

AEG Chicago Q3 – Stakeholder Challenge Series: IoT, Technology & Innovation

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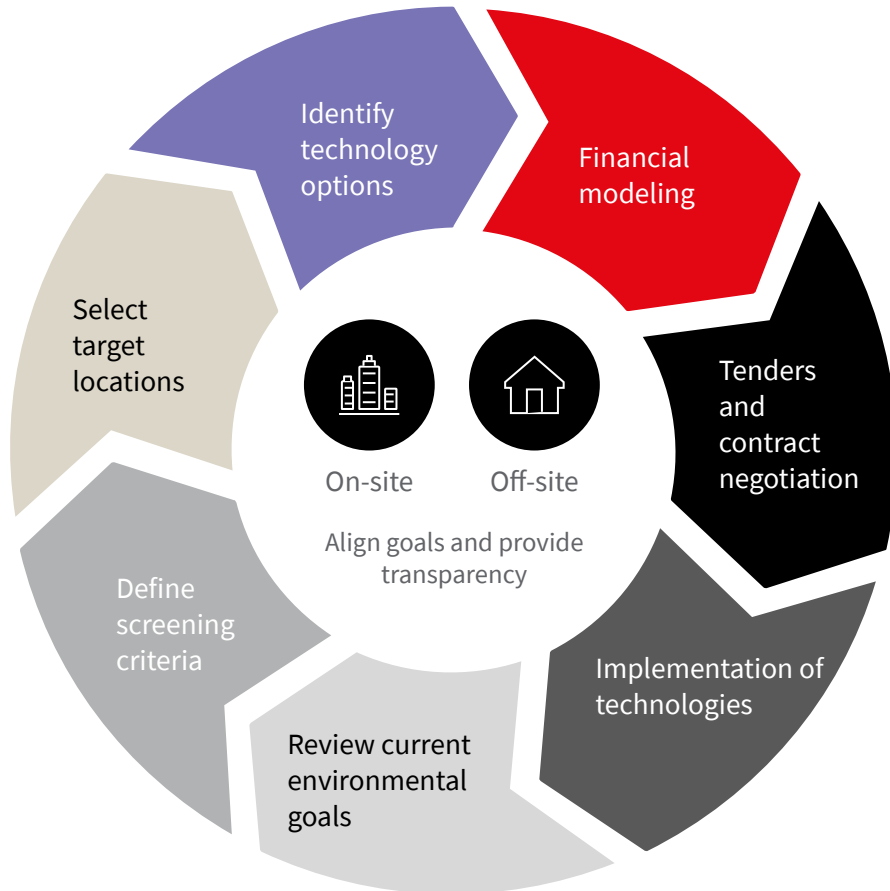
Longer term commercial real estate (CRE) investments do not translate into sufficient short-term returns; Split incentives between tenants and owners

- Implementing a holistic approach requires executing numerous agreements and integrating multiple solutions
- The diversity of, and sometimes conflicting, interests as well as unique differences of occupiers can complicate this process
- Any significant energy related decision, whether onsite or offsite procurement, requires agreement from multiple parties having interest in the property
- Investors may not receive the financial benefits associated with carbon reducing technologies and tenants may not be willing to invest if their lease term is short or they are unlikely to renew
- A quantifiable benefit associated with properties that have invested in innovative solutions to reduce their carbon footprint are limited in number



Balancing strategic goals and business needs

Continually evolving clean energy solution(s)



Range of benefits



Operational



Environmental



Performance



Return on investment



Social



Financial



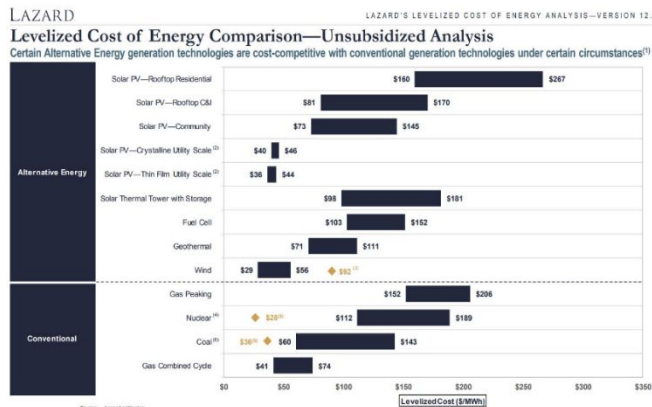
Governance



Reputational

Clean energy and carbon reduction increasing importance

Renewable energy costs changing



Cost of clean energy technologies (incl. storage) have been on the decline over the last decade plus, with community solar becoming on par with coal and some of the lowest levelized cost of energy.

Clean(er) energy, both onsite and offsite, is necessary to lower the carbon intensity of building operations.

Certain programs, like Illinois Adjustable Block Program (IABP), are finite and **benefits decrease over time** (e.g. ITC and PTC)

Increasing interest

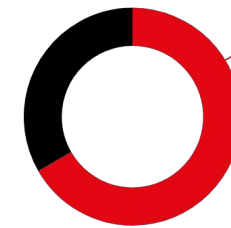
Many Fortune 500 companies pledge to be **100% renewable** within the next few decades and an ever-increasing number of smaller businesses, public entities and investor groups are following their leadership and making significant commitments.

Organization type, real estate portfolio profile, property locations and building type all impact what solutions make sense where and why.

Activist share- and stakeholders are pressuring commercial real estate owners to make more sustainable buildings or retrofit existing assets and make them more environmentally-friendly.

Attracting top talent

Sustainability matters in the battle for talent



Two-thirds of workers prioritize sustainability when considering employment.

Younger populations also better understand the impact of their daily activities and are increasingly looking to live and work in an environment that aligns with their core beliefs.

If buildings are not fostering innovation; technological advancement; and carbon reducing solutions; the sought after workforce will choose to work elsewhere (or from home) and CRE vacancy rates will increase

Regarding IoT, Technology and Innovation, to achieve Chicago's 2050 Carbon & Equity goals, the most critical obstacle to overcome is a **lack of sufficient data indicating a positive cost/benefit return** for developing grid-responsive, carbon neutral commercial real estate

