

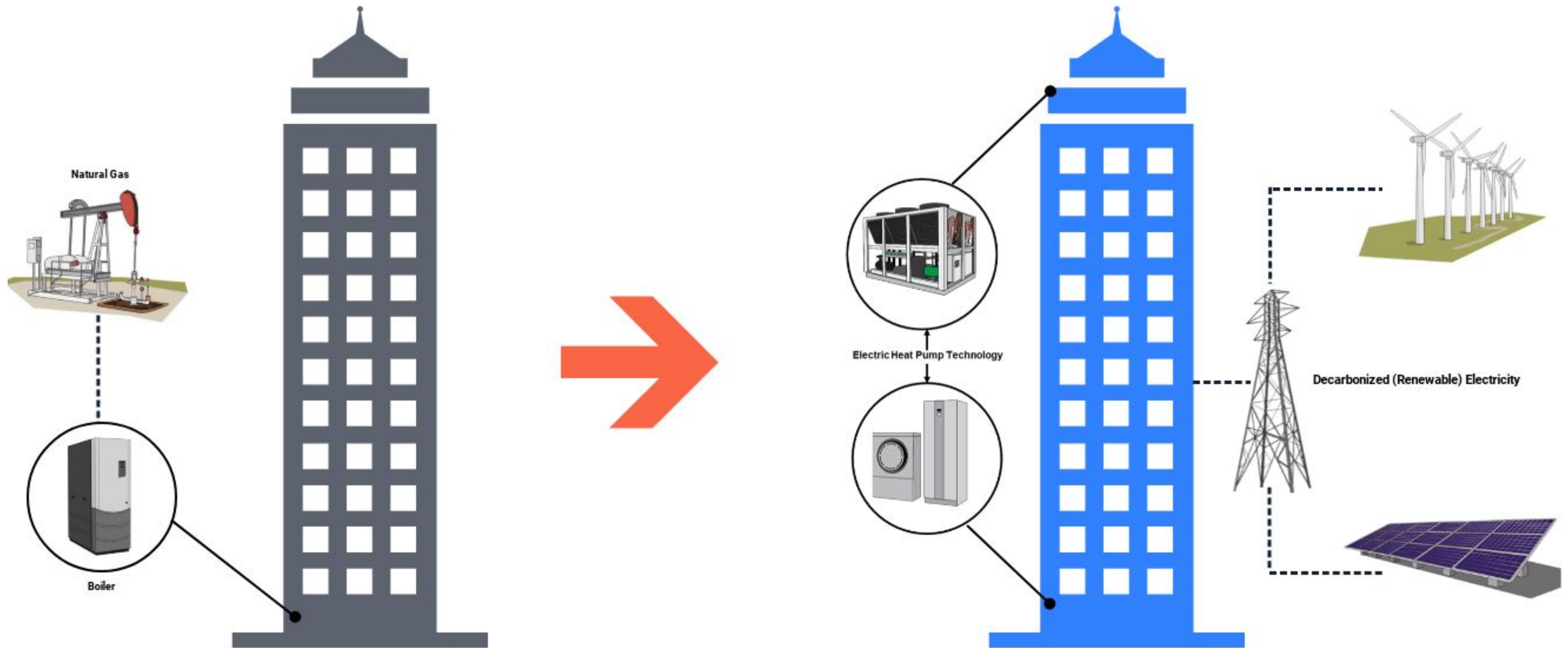
The building electrification train is leaving the station...can we get our clients on board?

Molly Dee-Ramasamy

Jaros Baum & Bolles



In the future, all buildings will need to be **electrified**



As **MEP Engineers**, we are responsible for selecting and designing building systems

But the decision to electrify involves many variables...

... all of which have **uncertain outcomes**

”

But what about the
electrical grid?

”

Can the available
technology even do this?

”

How much is this going
to cost me upfront?

”

Does this mean my utility
bills are going to
increase?

”

Wait, the laws are still
being developed...?



And when there is **uncertainty**, it's easier to stick with what you know



”

Everyone knows that uncertainty is stressful. But what's not so obvious is that **uncertainty is more stressful than predictable negative consequences.**

de Berker, A., Rutledge, R., Mathys, C. et al. Computations of uncertainty mediate acute stress responses in humans, 2016 as cited in Lewis why we're Hardwired to hate uncertainty, 2016

But the train is only headed in one direction... ...and we can't let our clients get left behind

San Francisco Becomes the Latest City to Ban Natural Gas in New Buildings, Citing Climate Effects

Seattle City Council passes measure to end most natural gas use in commercial buildings and some apartments

Berkeley first city in California to ban natural gas in new buildings

The city of Berkeley will no longer allow natural gas pipes in many new buildings starting Jan. 1, 2020. It's the first city in California to pass such a law, officials said.



De Blasio moves to ban natural gas hookups: 'Literally' our 'only choice is renewable energy'

DEVELOPING CARBON TARGETS FOR EXISTING LARGE BUILDINGS

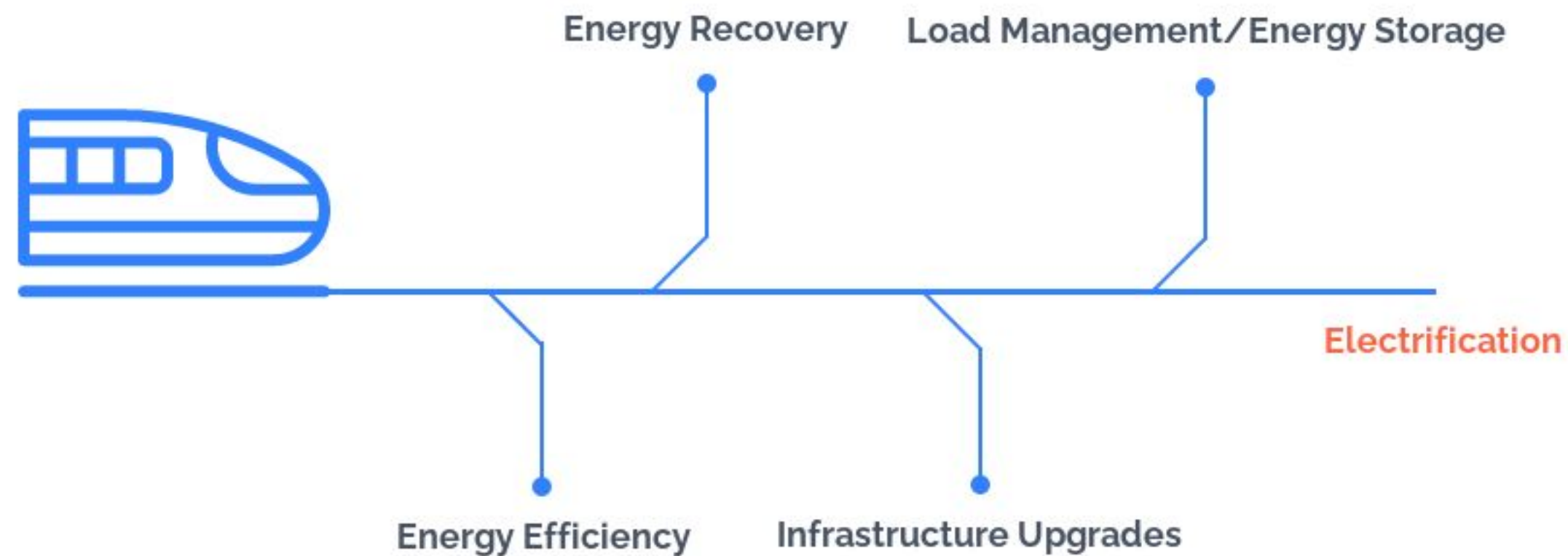
The City of Boston is developing a new policy to make existing large buildings healthy and climate-friendly. Large buildings in Boston are the biggest emitters of carbon pollution. Developing a carbon standard for these buildings is one of the [2019 Climate Action Plan Update](#) strategies.



If we wait to move toward electrification, we will **miss** our 80 x 50 goals and our clients will be at **risk** for future policy action

Regarding Buildings & Construction, to achieve NY's 2050 Carbon & Equity goals, the most critical obstacle JB&B has to overcome is...

...our clients' inclination to **delay** the journey toward electrification in response to overwhelming uncertainty



The train is leaving the station...we have a **responsibility** to get our clients on board.