



BUILDING ELECTRIFICATION

WHAT DOES BUILDING ELECTRIFICATION MEAN?

Building electrification is the movement to shift away from fossil fuels to power our buildings toward clean (i.e., renewable and emission-free) electricity.

We are seeing a shift in energy regulations and building codes to reduce or eliminate fossil fuel usage – primarily the use of natural gas – in the production of energy in our buildings, and instead relying entirely on grid-sourced electricity.

Several local municipalities, including Title 24 Building Energy Efficiency Standards, recommend an end to using fossil fuels for energizing our buildings. We're seeing the use of natural gas diminishing greatly – to the point where a natural gas connection to a building is no longer allowed in certain jurisdictions.

WHAT PROBLEM ARE WE TRYING TO SOLVE?

Buildings use about 40% of the nation's energy and produce a similar percentage of the nation's greenhouse gas emissions.

Achieving low or zero-carbon buildings will require a dramatic reduction in our dependence on burning fossil fuels to produce electricity for our buildings. Fossil fuels currently provide a great deal of grid-sourced and on-site electrical power:

MAIN SOURCES OF ELECTRICITY IN THE US



MAIN SOURCES OF ENERGY FOR BUILDINGS



WHY IS BUILDING ELECTRIFICATION IMPORTANT?

By forcing new building construction to rely solely on grid-sourced electricity, we eliminate the emissions created from non-grid-sourced electricity (natural gas, diesel generators, etc.), thereby lowering greenhouse gas emissions that warm our planet.

This move is a trend that is here to stay, and it is also part of a larger strategy to rely more and more on clean energy. That strategy works as follows:

- 1 Switch to grid-sourced electrical energy (aka: achieve "Building Electrification").
- 2 Shift away from natural gas and coal in the generation of electrical power for the grid and rely instead on nuclear and renewable (wind, solar, biofuel, geothermal) power.
- 3 Increase the electrical efficiency of our equipment to reduce electrical demand altogether.

HOW DO WE ACHIEVE BUILDING ELECTRIFICATION IN OUR HOMES?

Proven technologies like all-electric heat pumps, which provide both heating and cooling, as well as electric dryers and induction stoves are up to four times more efficient than fossil-fueled alternatives, saving consumers money, and are available on the market now.

