



It is 102 degrees in Los Angeles as I write this. Not in the San Fernando Valley or in the communities east of Los Angeles whose temperatures are regularly several degrees higher but in downtown Los Angeles. We're in [record](#) heat territory and [way above](#) historical averages. But temperatures aren't the only records that are breaking. Yesterday, the Los Angeles Department of Water and Power [reported](#) that we used more megawatts of electricity than we ever have, breaking a four year old record. We may exceed yesterday's record again today. The city is experiencing intermittent blackouts (though surprisingly few), with about 3300 residents currently without power.

The obvious question is whether our current heat wave is caused by climate change. And the standard refrain of scientists is that it's very difficult to link any individual weather event to global concentrations of greenhouse gases. But what isn't in dispute is that the kinds of temperatures Los Angeles is experiencing are completely consistent with a warming planet and are likely to grow in both frequency and intensity over the next decades. [Here's some scary data](#): California average temperatures are predicted to increase 2 to 5 degrees Fahrenheit by the 2030s and up to 9 degrees by the end of the century. Extreme heat events that used to occur once every 100 years are predicted to occur **annually** in the near future. We'll experience ten to fifteen times the number of extreme heat days by 2050. And lots of people will die as a result if we don't figure out how to adapt: more than 600 people died in a 2006 heat wave in Central California.

Researchers estimate that annual deaths from heat waves in California could reach 4,000

by 2025 and as many as 11,000 by 2050.

The [single best way](#) to reduce deaths from excess heat is also directly related to how we got into this environmental catastrophe in the first place: air conditioning. As long as the vast majority of our air conditioning relies on electricity generated from fossil fuels, our response to one of global warming's dire effects, heat waves, will be to pump more greenhouse gases than ever into the atmosphere. California is [on a path](#) to generate a third of its electricity from renewable sources by 2030 and continues to be a [national leader](#) in using less energy to produce the same amount of electricity as energy wasting states. But California is hardly the only region in the world that will experience heat waves as the planet continues to warm. The most recent Intergovernmental Panel on Climate Change [assessment](#) predicted increasing heat waves across the globe with very high confidence. All the while, air conditioning use around the world continues to explode, though the U.S. currently holds the [dubious distinction](#) of using more air conditioning than all other countries combined. Over the next fifty years, global air conditioning demand could grow to be [50 times](#) what the U.S. is currently using. If that demand is met with fossil fuel-generated electricity, well, you should be able to figure out what that means for our efforts to curb global warming.

There's another huge problem in relying on air conditioning to adapt to increasing temperatures. It's expensive. That puts low income communities, especially the elderly, at much greater risk of serious and even fatal reactions to high temperatures. France faced one of the worst and most catastrophic heat waves on record in 2003 and [researchers estimate](#) that of the 14,800 people who died (50,000 in all of Europe), more than 70 percent were over the age of 75.

The bottom line, as usual, is that we need to cut our greenhouse gases dramatically even in the face of increasing energy usage globally. We need to transition to an energy economy, globally, that is essentially carbon free by 2050. A [new report](#) out today says we can do so with little to no cost by forgoing large infrastructure investments in traditional coal-fired power plants and investing instead in renewable energy and other clean energy infrastructure. But we've got to do so almost immediately.

