You often see forecasts like this: “If present trends continue, electric vehicles will be X% of the auto fleet by 2035.” But this doesn’t mean much without explanation: what “trends” and “continued” in what way? The Energy Information Agency is a major culprit in that respect — they provide lots of projections but don’t unpack any of the assumptions. A press announcement or executive summary obviously can’t include all the technical details, but at least a few clarifications would go a long way.

Here are a few things you’d like to know about that projection in order to understand its significance:

First, present trends of *what*? In the case of the EV projection, does it mean trends in current sales numbers and prices? What about trends in other relevant parameters, like battery prices and capacity? Or oil prices? And what about economic trends, such as the proportion of sales in developed versus developing countries?

Second, what do you mean by “trend”? In looking at the trend for EV sales, you could just look at the percentage of new cars that are electrical and project what portion of the fleet will be electric in fifteen years if that rate holds steady. But you could also look at the year-over-year increases in that percentage and assume that the portion of electric vehicles sold in any given year will continue to increase at that rate. Or you could even look at how quickly the percentage of EVs in new car sales has been accelerating and extrapolate on that basis. Each of those could be described as a continuation of current trends, but over fifteen years they could lead to very different answers.

Third, what did you hold constant? Maybe you held everything else constant, or maybe all the other variables in your model were assumed to be tied to the ones that you’re extrapolating. For instance, maybe the model of EV sales assumes oil prices will hold at current levels or that EVs won’t impact overall economic growth. Or maybe not.

And fourth, what’s the margin of error? For instance, the Energy Information Administration has been making projections for renewables, coal, and natural gas for many years. How accurate have those been? Nobody ever tells you this, in many cases because it wouldn’t give you a ton of confidence in the projections. It may just be unrealistic to hope for anything different, so I’ll just put this quixotic aspiration to the side.

I realize that explaining all of this might be a bit much for most readers. But you could at least say something like, “By 2030, electric vehicles are projected to be X% of the fleet. This assumes the current decline in battery prices continues to accelerate at the current rate and other market conditions hold steady.” Is that really too much to hope for?