This is the second in a series of posts. The first post is <u>here</u>.

When people think about climate policy, they probably think that the goal of climate policy is reducing greenhouse gas emissions. And of course, the ultimate goal of climate policy is to reduce emissions, eventually getting us to an economy that is net zero.

But there are many different possible policy paths to get to net zero, and we necessarily have to make a range of choices about which paths to pursue. Each of those paths involves different tradeoffs among a range of key components – or policy goals. So climate policy necessarily also involves a range of other goals besides reducing emissions.

First, we might be concerned about the cost of reducing greenhouse gas emissions. Moving towards a carbon-free global economy is a very large, expensive activity to pursue, in the order of <u>trillions of dollars</u>. Thus, making decarbonization cheaper can have huge benefits, allowing us to pursue all the other important goals we might have.

Second, there is a general consensus that we need significant technological innovation to achieve net zero economies – both in terms of reducing the costs of technologies we already have (such as renewable energy or batteries) and in terms of developing and deploying new technologies (such as carbon capture). While technological innovation may not produce emissions reductions now, it is a necessary precondition for the emissions reductions we require in the future.

Third, enacting policy is necessarily a political process. Thus, what is politically feasible is an essential component to climate policy. Given the long-term nature of climate policy, and the constraints that exist on what can be passed in the future, political feasibility also necessarily requires a dynamic analysis: What policy that is feasible to enact today can build political support for more ambitious policy in the future? Answering that question requires an analysis of the political economy of climate policy – what political actors or interest groups does a climate policy grow, support or hurt, and how do those dynamics affect the relative power of those political actors or interest groups in the future?

Fourth, climate policy is also inherently distributional. There will be winners and losers from the transition to a decarbonized economy (as there are winners and losers in any economic transformation). Thus, climate policy will also involve fights about who will win and who will lose. Public support for climate policy tends to be higher if there is a broad public belief that policy is fair and equitable. Of course, defining what is fair and equitable can be difficult – academics and activists have advanced a wide range of different definitions of what "climate equity" or "climate justice" might entail, including requirements for equal

participation in policymaking, restitution for past inequities and harms, and broader economic redistribution.

All five of these goals – emissions reductions, economic efficiency, technological innovation, political economy, and equity – are important. But they will also involve choices. Policies that advance economic efficiency, such as a carbon tax, for instance, may not necessarily score well on political economy or technological innovation. A policy that advances political economy – for instance electric vehicle subsidies that grow a new technological sector and important new interest groups – may not score well on equity – because the subsidies disproportionately benefit higher-income consumers.

Making those choices depends on the political, economic, and technological context. At some points in time, for some countries, and for some sectors of the economy, we may want to emphasize one goal, such as political economy, over other goals, such economic efficiency. But over time, the dynamics will change – as policies make progress with one goal, we may see increasing costs on other goals, and may need to change our policies accordingly. That leads us to the concept of sequencing – a step-by-step process by which climate policy becomes more ambitious, more sustainable over time by varying which policy goals it prioritizes. Sequencing will be the focus of my next blog post.