Complexity has become very fashionable in governance studies, but not all governance arrangements are complex. How does it vary? What does “non-complex” governance look like? How do its politics differ? In this paper, I distinguish between complex, complicated and simple systems of governance and discuss the implications for institutional design and management. The basic hypothesis of this paper is that complicated governance systems are more amenable to management, and therefore more likely to respond to interventions in positive ways – i.e. those desired and intended by regulators. Complex regulatory systems, by contrast, exhibit emergent behaviors, and do not respond to the hierarchical exercise of authority traditionally associated with regulation. They are more difficult and costly to manage, and policy interventions are less likely to produce the intended results. To examine this plausibility of this proposition, I review the structure and performance of three pollution markets. The Acid Rain Program, the EU Emissions Trading Scheme (EU ETS) and AB 32, the California cap and trade scheme represent one of the oldest, largest, and most ambitious pollution markets (respectively). They also present helpful variation with which to investigate my hypothesis—ranging from complicated to complex. I find that the Acid Rain program, widely heralded as evidence of the success of pollution markets, was a complicated rather than a complex system. By contrast, cap and trade schemes are complex regulatory systems, and therefore less likely to produce the desired outcomes.