Executive Summary

In recent years, the political economy of electricity provision in Germany has been strongly influenced by two factors. The first is the country’s ongoing commitment to increase the share of renewable energy technologies. The second factor is the nuclear catastrophe at Japan’s Fukushima in 2011. This event had a profound impact in exacerbating a longstanding skepticism in Germany on the merits of nuclear power, and led to the legal stipulation of its phase-out in the same year. Both factors are the most salient pillars of Germany’s so-called Energiewende (energy transition), which advances the most ambitious subsidization program in the nation’s history, with costs that may approach those of German re-unification.

This paper presents evidence that the accumulating costs of Germany’s Energiewende are butting up against consumers’ willingness-to-pay (WTP) for it. Turning attention to the public’s acceptance of these costs, which have to be born by electricity consumers via a surcharge on their bill, we draw on two stated-preference surveys conducted in 2013 and 2015 that elicit the households’ willingness-to-pay (WTP) for green electricity. Two models are developed. One employs an open-ended question on the WTP for green electricity that is posed over two points in time, thereby affording the unique opportunity to gauge how WTP has changed. The other model uses a closed-ended dichotomous-choice question framed around the WTP for reaching Germany’s target of a 35% renewable share in electricity provision by 2020.

Among our main findings, the descriptive results suggest tepid support for financing renewable energy technologies. In fact, the open-ended responses reveal a marked decrease of about 17% in the average WTP between the 2013 and 2015 waves of the survey, a period during which the surcharge paid by households for green electricity rose commensurately, by 17%. Overall, the survey results highlight a strong contrast between the households’ general acceptance of supporting renewable energy technologies and their own WTP for green electricity: On the one hand, the share of respondents who agreed with the statement that, in principle, renewable energy technologies should be supported increased from 84.4% in 2013 to 88.0% in 2015. On the other hand, almost 60% of those household heads who participated in both surveys reduced their WTP for 100% green electricity relative to 2013.