

Combining climate policy instruments: How the Swiss do it and what it delivers*

Beat Hintermann[†] and Maja Zarkovic[‡]

December 11, 2018

Submitted for the Economics Lunch on December 19, 2018

Abstract

In the context of several international agreements, Switzerland has committed to reduce greenhouse gas emissions. The Swiss climate policy comprises three regulatory instruments: the CO_2 levy, the Swiss Emissions Trading System (CH ETS) for energy-intensive firms, and an additional “non ETS” program for medium-sized and small-sized firms. This tripartite climate policy is unique in the international environment in the way in which it combines features of both market-based and command-and-control regulation. Using confidential emissions data from the Federal Office for the Environment, we are the first to provide ex-post evidence on the impact of Swiss climate policy instruments, by estimating the differential impact of the CH ETS and the “non-ETS” program on emissions intensity. Our preliminary results suggest that the two programs performed the same in terms of emission intensity reductions. Using Emissions Trading Registry data, we also compare the two programs along the trading dimension and find that, on average, a higher share of the abatement burden is traded in CH ETS than in “non-ETS” program.

Keywords: *Climate Policy, Firm-level effects, Difference-in-differences, Cap-and-trade, Command-and-control, Switzerland;*

JEL codes: F64,H21,H23,Q54,Q58;

*This research has been supported by the WWZ Förderverein of the University of Basel.

[†]University of Basel, Peter-Merian-Weg 6, CH-4002 Basel. b.hintermann@unibas.ch

[‡]University of Basel, Peter-Merian-Weg 6, CH-4002 Basel. maja.zarkovic@unibas.ch