

Washington University in St. Louis

Washington University Open Scholarship

Spring 2018

Washington University
Senior Honors Thesis Abstracts

Spring 2018

The Effect of State Policy on Renewable Energy Capacity

Max Litvack-Winkler

Washington University in St. Louis

Follow this and additional works at: https://openscholarship.wustl.edu/wushta_spr2018

Recommended Citation

Litvack-Winkler, Max, "The Effect of State Policy on Renewable Energy Capacity" (2018). *Spring 2018*. 82.
https://openscholarship.wustl.edu/wushta_spr2018/82

This Abstract for College of Arts & Sciences is brought to you for free and open access by the Washington University

Senior Honors Thesis Abstracts at Washington University Open Scholarship. It has been accepted for inclusion in Spring 2018 by an authorized administrator of Washington University Open Scholarship. For more information, please contact digital@wumail.wustl.edu.

THE EFFECT OF STATE POLICY ON RENEWABLE ENERGY CAPACITY

Max Litvack-Winkler

Mentors: Maria Canon and Bruce Petersen

Since Iowa first created a Renewable Portfolio Standard (RPS) in 1983, state governments have been creating legislation to increase renewable energy capacity. Three policy groups in particular—RPS, Net Metering (NM), and Interconnection Standards (IS)—have been used to spur growth. Previous researchers have found positive correlations between RPS and renewable energy production, while noting mixed results between Net Metering/Interconnection Standards and renewable energy production. However, previous studies have quantified Net Metering and Interconnection Standards only as dummy variables. This thesis uses counting variables to find out whether more ambitious NM and IS policies produce higher correlations with renewable energy production, compared to more modest policies. This study also measures individual elements of each policy, finding a surprising negative result for program capacity limit—a NM element—and a significant positive result for number of breakpoints—an IS element. Additionally, the paper adds an RPS-related variable to determine whether states should create larger, more spread-out goals or smaller shorter ones, returning a significant result that favors the latter option. Overall, my findings should guide policymakers on RPS and provide a baseline for later papers on quantifying NM and IS as counting variables rather than as dummies.