## Economy and Environment During COVID-19 Slowdown (Technical Report)

Influences on Climate Politics in the Trump Administration (STS Research Paper)

An Undergraduate Thesis Portfolio
Presented to the Faculty of the
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Bachelor of Science in Systems Engineering

by

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## **Preface**

Infectious diseases and environmental hazards transcend national borders. Interest groups compete to influence public policy responses to these threats. Governments have the responsibility of providing citizens with what they cannot effectively provide for themselves.

Complexities arise when governments are tasked with balancing competing interests amid unprecedented global crises.

National responses to the COVID-19 pandemic affected domestic production and air quality. Many countries instituted lockdowns and other restrictions, at a cost to economic growth. Responses in South Korea, China, Japan, New Zealand, and Australia were examined. GDP growth for each country was modeled in time series and spectral analyses to compare actual 2020 economic performance against estimated performance had no pandemic occurred. NASA satellite imaging indicated air quality improvements in all countries; traffic was a significant predictor of NO2 levels. In all countries, national pandemic responses had major economic and environmental effects. The results may be useful in future emergency response planning.

In the United States, business interests and environmental advocacies competed to influence climate politics during the Trump administration. Business interests, predominantly from the energy sector, gained greater influence in Congress and in the White House. The Heritage Foundation and other conservative thinktanks influenced cabinet appointments. As the Environmental Protection Agency (EPA) relaxed enforcement, advocacies used litigation to enforce environmental standards and collaborated to promote responsible climate policy. Environmental, health, and social justice advocacies worked together to resist the threats they perceived from the Trump administration.

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