



MET AD642 A3 Project Management

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Assignment 1

Rationale for Boston University Climate Action Plan on
Wind New Renewable Energy

Jiaying Lin



Executive Summary

The Boston University Wind Project aims to provide an alternative energy source to meet the electricity needs of all its campuses through the use of new renewable energy, which could decrease emissions in Boston. After deep consideration, BU chooses this project with the largest influence on global emission waste among 127 related project proposals (BU Wind, 2020). Through this project, Boston University will not only fulfill the high-level academic research necessary for its mission, but it will also contribute to the long-term resilience of the campus for future generations. This paper will illustrate the value of this project, its financial circumstances as well as construction concerns. Overall, this project will bring about positive impacts on the pressing challenges faced in the contemporary world, with both educational and environmental advantages, and will take Boston University to a new phase.

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Description of BU Wind Project

Boston University Climate Action Plan (CAP) is a long-term project that began in 2016 intending to address the problems posed by environmental degradation, exploring the feasible way to reduce BU greenhouse gas emissions to create an outstanding experience for researchers, students, and staff. As a part of the CAP, BU Wind Project is dedicated to easing the carbon mission by purchasing clean energy annually from the wind farm in South Dakota and committed a 15-year Power Purchase Arrangement (PPA) with ENGIE North America – the builder, operator, and developer of the wind farm (Barlow R, 2020).

By the project's completion, BU will receive 205,000 megawatt hours of electricity from ENGIE North America starting in 2020 (Barlow R, 2020). By reselling the new renewable energy to Midwest, BU is able to claim the corresponding legal credits so called Renewable Energy Certificates (RECs) against the carbon emission yielded in Boston (Barlow R, 2020). To pursue long-term tangible influences on climate change and gas waste, the BU task force introduced the concept of ‘additionality’ by establishing a new renewable energy source (unbuilt wind farm) that is generated only from the BU agreement with ENGIE, which goes beyond the existing market approach of purchasing RECs directly (BU Wind, 2020).

According to Barlow (2020), Boston Mayor Martin Walsh applauds BU’s mission to fight climate change and being a good model of leading institutions aiding Boston city to achieve carbon neutrality. With the backing of financial institutions and BU's established credibility, this project will continue to aim for not only current reductions

in emissions, which will benefit the environment, but also provide opportunities for research and study.

Mission, Vision and Value: BU Wind Project

The mission of Boston University

Boston University is a long-established private research university with a strong inclusive presence that attracts students from all over the world and has committed to providing excellent education and research program to BU students. With academic rigor and global foresight, BU creates new knowledge to benefit society (Boston University Website). Boston University Sustainability supports the transformation and planning of a sustainable future considering the interconnection and interdependence of environmental, social, and economic factors, focusing on having long-term positive effects on both individuals and the earth (Boston University Sustainability Website).

Values and Vision connected to BU Wind Project

As a BU student, BU has been demonstrated an outstanding level of education and it is beyond proud of seeing BU participated in addressing global concerns as well as bring issues to new generation's attention, for instance, might attract students and researchers around the globe. BU Wind Project highly value environmental concerns and is committed to adding positive impacts for future generations while ensuring that their ability to meet their needs is not hindered. Furthermore, continuing BU's academic institutional mission, this project will provide faculty and students with opportunities of engaging with the developer and gain from the project (BU Wind, 2020):

1. Participate in the annual wind farm tour, wind turbine factory tour, and expert lectures on wind energy, open to all university affiliates.
2. Real-time data sharing for researchers, collaboration, and educational purposes.
3. A two-month internship opening for BU students and alumni.

In the case of BU Wind, BU will develop academic values for global institutions and researchers as a living laboratory and enhance its reputation for taking the nation's lead on environmental concerns resolving among universities.

Since 2006, BU Wind project (2020) claims that the university has already dropped 25% of carbon emissions and will leave no stone unturned to achieve progress within ten years with \$141M on CAP over a decade. The task force in BU Wind Project along with the CAP proposal recommended that BU will ambitiously follow the strategies on emission reduction and ideally reach the goal of carbon neutrality by 2040 (Appendix A). This is an influential project with far-reaching impacts on climate action and campus resilience, reflected by Boston University Sustainability's leading knowledge and a visionary sustainable future.

Financial and Other Justification

As a long-term commitment, the energy procurement team and related department reinforced a large effort on analyzing the risk and cost of the project that influence the fluency of purchasing renewable energy and creates NPV. With BU's credit rating, Banks and other investors will be attracted to financing the project and guarantee the developer obtains predictable cash flow with a defined price on purchasing the

electricity affected by price elasticity (BU Wind, 2020). In addition, Boston University's Climate Action Plan predicts that investment in the project will yield cumulative savings of more than \$85M, which will then be placed back into the Climate Action Investment Fund (Boston University, 2017). Moreover, BU's financial statement and cash flow indicate a strong financial condition and liquidity on supporting this project. Cash and Cash equivalent on the financial report for the years ended June 30, 2021, shows a significant increase in short-term investment which generated high returns with around \$880M excess of investment return (KPMG, 2021). The current reference is to the balance sheet at the start date of the project which is also the period impacted by the pandemic. Thus, the flow of funds will be even more efficient in the post-Covid era.

BU Wind Project (2020) has also taken construction impacts into account and has completed advanced environmental assessment based on the requirement, aiming to minimize potential negative consequences and be responsible for protecting wildlife.

Conclusion

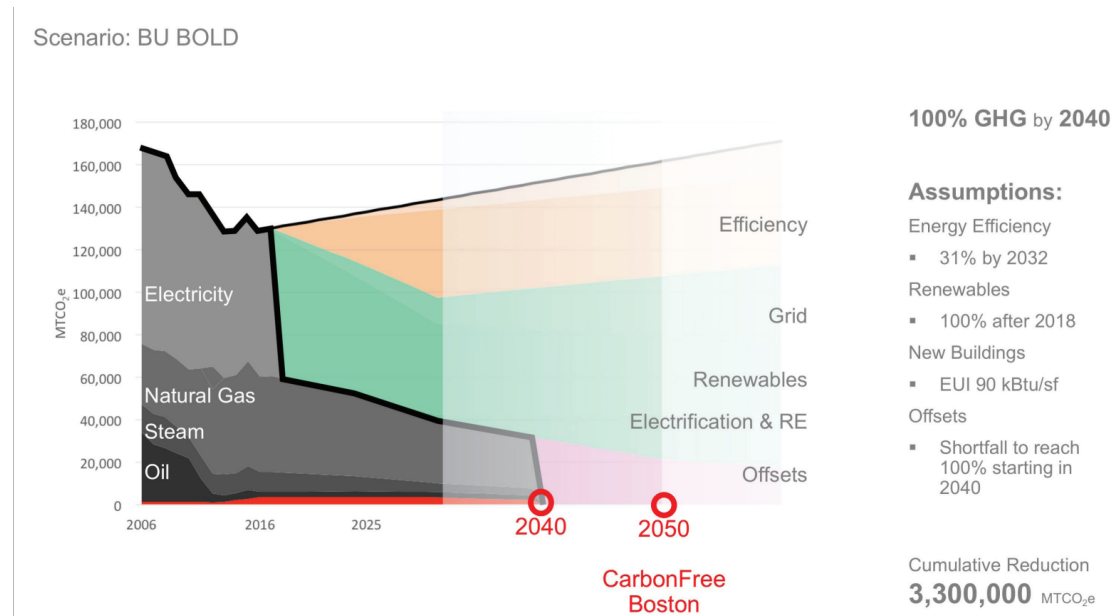
BU Wind Project is a milestone in BU's plan of contributing to climate change issues, which has been represented through the university's mission of outstanding education and providing sustainable life experiences for students and staff. Last but not least, this project is also considered a vigorous project to elevate BU's position as a national leader in overcoming the challenges of climate change and reducing operational emissions.

Reference

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Appendix

Appendix A



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https://www.bu.edu/sustainability/files/2021/05/BUClimateActionPlan_Report_FINAL.pdf