Team ID: U11

Robert Day School Consulting

| Team Member Name | <u>Year</u> | <u>Major</u> |
|------------------|-------------|--------------------------------------|
| Tatum Hall | 2023 | Economics & Literature |
| Grace Lu | 2023 | Economics & History |
| Chase Mendell | 2022 | Environment, Economics, and Politics |
| Sabrina Zhou | 2023 | Economics & Finance |

Advisor(s): Amy Flanagan

Topic: ExxonMobil's Green Future: Refining a Well Oiled Machine

Audience: ExxonMobil's Board of Directors

Sustainable Development Goals

SDG #7: Ensure access to affordable, reliable, sustainable and modern energy for all

<u>SDG #9:</u> Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Executive Summary

According to ExxonMobil's 2021 Energy and Carbon Summary, renewable energy sources, such as wind, solar and hydro, are expected to see significant growth. While competitors such as BP and Shell have made significant pledges to invest in renewable energy, ExxonMobil's sustainability strategy continues to focus on reducing greenhouse gas emissions from oil production. Unless the firm makes a strong effort to invest in renewable energy and refine its current practices, ExxonMobil will lose out on future profit opportunities and incur greater losses from a declining fossil fuel market.

ExxonMobil should take a two-pronged approach to increase environmental sustainability: investing in green energy and refining current operations. By investing in renewable energy sources, such as wind farms or solar power, ExxonMobil can slowly transition its business model and operations to more sustainable methods while simultaneously remaining profitable. This investment can fund both the construction of new renewable energy sources as well as research and development aimed at improving efficiency and exploring new technologies. We have identified actionable steps for ExxonMobil to take in site identification, waste disposal, and minimizing contaminant leaks alongside an investment into the future of energy. By employing 3D modeling and geographic information systems mapping to research potential sites, ExxonMobil can reduce environmental harm, save resources, and increase confidence in future drilling sites' yield. Additionally, using micro-refineries to recycle waste oil into usable diesel oil will decrease costs and provide an additional revenue source. Improving ExxonMobil's current oilfield equipment to prevent leaks reduces liability and environmental detriment. By investing in alternative methods and identifying possible investments in environmentally-conscious technologies, ExxonMobil has the potential to transform its environmental footprint and position itself as a leader in green initiatives.