**Team ID: UG35**

**CDMKV Sustainable Consulting**

**Team Member Name Year Major**

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**Topic Title:** Power of a Green Thumb: The Future of Advanced Recycling

**Audience:** ExxonMobil Board of Directors

**Sustainable Development Goal**

SDG #12 Responsible Consumption and Production: Ensure sustainable consumption and production patterns.

**Executive Summary**

Plastic benefits society in many of the products we use in everyday life. However, according to a 2022 OECD report, plastic recycling remains low as only 9% of plastics are successfully recycled. Along with an increase in demand for products with lower environmental impacts, there has also been an improvement in quality of life, and plastics will continue to be part of the necessities of modern life. In 2021, an analysis showed the Houston area could support up to 100 advanced recycling facilities by 2030, each capable of processing 25,000 tons per year, reducing greenhouse gas emissions (GHG) by 10 million metric tons of CO2 per year, and in total supporting 15,000 jobs and half a billion dollars in annual payroll.

ExxonMobil's current plastic production business practices contribute significantly to the pollution of the planet and the depletion of the planet’s natural resources. The current plastic lifecycle from production to consumption to finally disposal has exacerbated marine pollution and microplastic contamination issues. Such practices have taken a toll on the environment, as well as tarnished the brand image of ExxonMobil. As CDMKV sustainable consulting, we recommend that ExxonMobil invests resources in the research and development of bio-friendly plastics, as innovators in the plastic production industry. We also recommend that our client emphasize the reuse of plastics at the end of their lifecycle, which should save money for ExxonMobil and prevent future environmental pollution.