**Team ID: U23**

**GR&P Consulting**

**Team Member Name Year Major**

Joaquín Martínez 2025 Philosophy and Linguistics

Armeen Khazraee 2025 Legal Studies

André Benicio 2025 Legal Studies

Sydney Rothka 2026 General Business

**Advisor(s):**  Dr. Joan Martínez Evora

**Topic Title:** Your First Green Step

**Audience:** UPS Board of Directors

**Sustainable Development Goal**

SDG # 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

SDG # 15: Take urgent action to combat climate change and its impacts.

**Executive Summary**

It is no secret that diesel engines come with many costs. Though more efficient than gasoline, they have very detrimental effects on the environment and human health. According to the Environmental Protection Agency (EPA), heavy-duty trucks accounted for 23% of all transportation-related greenhouse gas emissions, despite making up just 4% of registered vehicles on the road. Diesel engines are also the leading source of particle matter (PM) emissions in the transportation sector, accounting for more than 90% of these emissions in the country. Studies link the exposure to diesel exhaust to a range of health problems. The World Health Organization (WHO) has estimated that air pollution from diesel engines is responsible for more than 430,000 premature deaths each year. Diesel exhaust has been linked to respiratory problems such as asthma and bronchitis, as well as heart disease and lung cancer for operators and the overall population.

Recently, the government has enacted stricter regulations on transportation emissions to slow climate change. This proposal includes technology which permits the benefits of diesel trucks while also protecting the environment. The license of the technology will turn your own heavy-duty diesel-fuel engines into more financially sound and more environmentally friendly machines. It allows the trucks to use other fuels, like ethanol. By implementing it, diesel trucks can now produce significantly less pollution and greenhouse gases, helping to reduce their impact on human health and the environment. It benefits the planet, helps companies meet emissions regulations, avoid fines, and improve their public image.