

# **Executive Summary**

## **The Problem**

Once pristine mountains are being tainted with mountains of human poop, and the world's highest peak is no exception. There is no effective solution for human waste at Mount Everest, leading to serious health and environmental concerns for the climbers and local communities. Drinking water is contaminated all the way from Everest's higher camps to the nearest village of Gorak Shep, where sickness is common, and experts say disease is imminent. Mount Everest is a deity in local Sherpa culture, but the 35,000 foreigners who visit base camp each year are leaving the once sacred location covered in over 25,000 pounds of poop. This endangers the health of their guides and communities who risk their lives to deliver them to the summit. These tourists do not intend to be disrespectful; they simply do not have access to appropriate facilities. At a price tag of around \$60,000 for a summit climb, these people are more than wealthy enough to pay for a solution. The technology to do this exists; all that is needed is for someone to have the knowledge and drive to implement it.

#### **Our Drive**

Our founder, Lhakpa Sherpa was born and raised among the Himalayas of Nepal, where his father worked as an elite mountain guide on and around Everest. His team is based in Seattle, where they are perfectly poised to combine some of the world's most innovative and exciting technology with the knowledge and drive of their founder.

#### **Our Solution**

Safa Himal provides an efficient and hygienic solution to the issue of human waste on Everest using waterless dehydrating toilets and porter services to be implemented at base camp. The dehydrating process makes feces up to 75% lighter and smaller, while significantly decreasing risk of illness and disease. Feces that are currently being dumped into open pits will be funneled into a biogas decomposition plant that converts waste into methane fuel. This process will transform the harmful impact of human waste into a productive source of energy, while solving significant health concerns, cleaning the environment, and respecting/preserving local culture. Once established on Everest, Safa Himal will move to nearby peaks and replicate the process, where there are currently no effective sanitation solutions.

# **Financial Highlights**

Safa Himal will operate as a socially responsible company, initially funded by investment and a loan. We anticipate \$26,000 in profit in the second season with \$150,000 in revenue, with a net positive balance of \$75,285 by the third season. Revenue will be collected through touring companies, who will charge their clients \$5 per day for use of the toilets, for an estimated 120 days per climber during any given season. Porters will be paid \$30 per day, a generous income for the region.

## **Comparative Advantage**

There is currently one non-profit attempting to manage waste at Everest. Unfortunately, their efforts only move the waste to where it is less visible to climbers but is still dangerous and exposed. Safa Himal's dehydrating toilets will replace the currently used buckets, offering a 75% reduction in the trips necessary to reduce waste. Additionally, our business model will allow for expansion and improvements, allowing for ever increasing impact and ultimately diversification of risk at other locations. In marketing, Safa Himal holds a distinct advantage, with voices such as Ngima Nerma Sherpa (youngest man to summit Everest 23 times) voicing support for the project.