Terraforming, and with the large emmissions of



Terraforming, the process of shaping a moon or planet's atmosphere, temperature, and topography to closely resemble Earth so it can sustain human life. It is a fictional concept that has been making its way closer and closer to becoming a reality as technology continues to advance. Even Elon Musk CEO of Tesla and Space X believes that terraforming " is something that we can do in our lifetime," (Musk, 2016) and even hopes to retire there himself. Terraforming a moon or planet is not a simple job with one possible way, there are many ways that terraforming could be achieved but most of them would not be completed in our lifetime. Bombarding the area with nuclear weapons, using microorganisms to slowly develop the area, and inventing the technology with its purpose to be strictly for terraforming a planet quickly, are three that reoccur in many debates on how a planet or moon should be terraformed and which is more efficient. Thermonuclear bombs are the least costly on the list.

Elon Musk, inventor, and engineer, firmly believes that blasting mars with thermonuclear warheads on its poles removing a majority or all of its ice. Mars' atmosphere is known for being incredibly thin, and with the large emmissions of CO2 from the thermonuclear bombs and the frozen CO2 on the planets surface already, the atmosphere in theory, would thicken and poteentioally allow the planet to hold liquids such as water. Elon Musk altered this plan but some still support the idea of the thermonuclear bombs.

Musk's new plan is to launch fusion bombs above Mars that explode every few seconds giving the red planet its own "mini suns" although the technology is not created yet Musk believes that the technology can be created and when was asked on the difficulty he was quoted saying "Yeah,

absolutely, no problem".' (Griffin, 2015) Robert Alan Mole, an aerospace analyst, engineer, assumes Musk's original idea is in fact workable and believes that we have "the warheads and the orbiters. We can start whenever we like." (Mole, 1999) Mole proposes an idea similar to that of Elon Musk's original but alters it so that instead of launching thermonuclear bombs at Mars surface or using fusion bombs to be mini suns, we use a mini fusion warhead encased in a penetrator, (a penetrator is a machine designed to withstand