

May 27, 2020

Dear Sirohi and Thomas.

Congratulations! Your whitepaper is a masterpiece! I am sure that it will inspire many to take up similar solar projects for schools across the U.S. and the world.

You should be very proud of what you have done for the Mount Desert Island High School (MDIHS) Solar Project. As a citizen and colleague, I am grateful for what you and your fellow students have accomplished in this project for yourselves, your school, the community, and the planet.

This project is proof that there is enormous hope for solutions to climate change management by youth on local-to-global scales. You have shown that by empowering youth— giving them opportunities, and surrounding them with a supportive community—you can transform the world we live in through direct action. Direct action taken by youth is the ultimate form of climate-change activism.

Your generation, aptly named "Earth Gen," holds the promise of ensuring sustainability for thousands of future generations on Earth. Earth is the only planetary home that we have thus far. While other inhabitable planets are likely present in the universe, we can't count on interplanetary colonization anytime soon—not before climate change starts disrupting society. Although many point to Mars as an option for human habitation, it is a dead, lifeless planet with no instruction manual to support millions—or billions—of humans. What if we are the *only* inhabitants, on the *only* planet of its kind, anywhere in the universe? For all intents and purposes, we should act as though this is the case. Your exemplary actions influence others to think this way as well.

As we look across the Earth, we see degenerating ecosystems and diminishing biodiversity everywhere, disassembled by human activity and climate change. Ecosystems are fragile collections of living communities that we cannot recreate at will. Importantly, ecosystems are "time-dependent" entities bound by the rate-limiting laws of physics and biology for regeneration. We need to give ecosystems the time and space to recover and heal from human-induced damage. The MDIHS Solar Project provides the planet with "eco-time." You may not see it directly, but the production of solar energy, avoiding anthropogenic emissions, is a lifeline to ecosystems that require time to adjust to carbon dioxide induced surface warming and the related changes in precipitation and destructive human activity. If ecosystems could speak, they would embrace you with hugs and thanks. My experience at Biosphere 2, a closed ecological system in Arizona, helped me understand how ecosystems depend upon us to keep them whole and healthy by maintaining favorable environmental conditions for growth. In doing this, ecosystems give back while preserving nature. Without nature, we cannot exist. Perhaps with renewable energy and reduced carbon dioxide emissions, we can learn to co-exist with nature, creating a new, but old, biosphere, "Biosphere 3." Mount Desert Island is a microcosm of a larger vision for a balanced human-nature co-existence, of which the MDIHS Solar Project is a key component in its creation.

Our contemporary society is in a strange conflict with the climate change we have induced. We can't see carbon dioxide or easily point to a time of day or place that is affected by its elevated levels, but the MDIHS Solar Project allows us to visualize what is taking place and to act. We can find carbon dioxide in the shadows of extreme temperature, precipitation, and in the resulting deleterious effects on all living organisms. Your project brings climate change out of the shadows and into the bright lights of carbon dioxide reduction through action and hope.

I am, again, thankful for your sincere and meaningful efforts to ensure environmental sustainability in the present and for future generations.

Regards,

Bruno D.V. Marino Ph.D.

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CEO, Founder, Planetary Emissions Management Inc.