



Green Entrepreneurs and Inventors

Innovation is the key to building a more sustainable world. As 15-year-old Time Magazine's first Kid of the Year, Gitanjali Rao says, "Many of my inventions have been inspired by just watching the news." Her first invention was in response to the public health water crisis in Flint, Michigan.

As a freshman in high school, Ana Sophia Mifsud got a certificate in solar energy, where she learned that innovative technologies could both help impoverished areas improve economically and safeguard the environment. That was when she knew she had found her calling. After college, she began working at Amory Lovins' RMI (Rocky Mountain Institute), where she was introduced to the concept of Applied Hope—a mantra that she had unwittingly been living, and aspiring toward all her life. In 2017, after Hurricane Maria ravaged Puerto Rico, Ana Sophia helped install microgrids in 10 public schools, giving more than 4,000 students and faculty access to clean, resilient power.

Azza Faiad is an up-and-coming leader in Egypt's renewable energy industry. In high school, she discovered a way to convert plastics into biofuel, while significantly reducing the cost of the manufacturing process with a cheap, abundant catalyst not used before. Her work was supported by the Egyptian Petroleum Research Institute in Cairo, who saw her incredible potential as a scientist and creative thinker. She was awarded the EIRO Forum Prize and was invited to participate in the European Union Contest for Young Scientists (EUCYS).

Vincent Kimura always remembered his grandfather's stories of working in the sugarcane fields in Hawaii. He decided early on that he was going to dedicate his life to protecting the environment, and the small farmers who've always known how to care for it. Vincent is now the CEO of Smart Yields, a globally recognized agricultural technology company revolutionizing the way small and medium-scale farms operate. He is involved in various green enterprises, including AgriGro and Inovi Green. A main focus of his work and life is on supporting struggling farmers around the world and repairing food systems using technology, data, and collaboration between the public,

private, and nonprofit sectors.

Daniela Fernandez founded the Sustainable Ocean Alliance (SOA) when she was just 19 years old. SOA develops leaders, cultivates ideas, and accelerates solutions in the field of ocean health and sustainability, with contributors from more than 150 countries worldwide. SOA's Ocean Solutions Accelerator supports brilliant start-ups that contribute to the health of the ocean. For her work, Daniela has been recognized by then U.S. Secretary John Kerry and former President Bill Clinton. She is also a member of the World Economic Forum's Friends of Ocean Action and has been recognized by Forbes's 30 Under 30 for her environmental achievements.

Gary White discovered his calling to civil and environmental engineering in college. "That was where I found an intersection of my greatest passion and the world's greatest needs," he says. "Engineering answers to the world's problems would be the path that I would take from there on." He'd read about Dr. Muhammad Yunus, who founded the Grameen Bank in 1983 to provide micro-credit loans to entrepreneurs, mostly women, in Bangladesh, and who had gone on to win the 2006 Nobel Peace Prize. In 2008, Gary met Matt Damon at the Clinton Global Initiative. At the time, Gary was running an organization called Water Partners that was helping people living in poverty get access to microloans for clean water and sanitation, and Matt was running an organization called H20 Africa, which helped to supply people with drinking water in rural Africa. They merged their organizations to form Water.org, which has mobilized \$2.6 billion in capital to support safe water and sanitation projects around the world.

At the Institute we expose young people to opportunities to explore the exciting world of innovation in business with startups. Our strategic partner in Hawaii -- Design Thinking Hawaii -- used an innovative approach to getting people to "think out of the box" which has led to numerous start-ups at the groundbreaking company Oceanit. At the Institute's Job Shadow Day young people get a chance to meet them. 17-year-old Mickie Hirata was intrigued to learn about IBIS Intellisockets. "It was great to meet those who've developed the programming, designing, project planning, business, assembling, and even invented the Intellisockets!" she says. "I had no idea how new this company was, and how special I was to be their first experiment! It was incredible to see them upgrading their top-secret blueprints with it."

Young people are eager to learn how to innovate solutions for the myriad of climate change problems we are facing. We need to find ways to match their desire to innovate with these opportunities – and connect them with green entrepreneurs and inventors who are working on creating tomorrow's solutions. The stories in this chapter show how this combination is a win-win!