NEWLIGHT

April 1, 2022

Ms. Rajinder Sahota
Deputy Executive Director for Climate Change and Research
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Filed Electronically

Re: 2022 Scoping Plan Update – Initial Modeling Results Workshop

Dear Ms. Sahota:

Newlight Technologies, Inc. (Newlight) is pleased to submit these comments on the 2022 Scoping Plan Update – Initial Modeling Results Workshop. Newlight, based out of California, uses nature-based carbon capture technology and manufacturing process to offer a scalable alternative to carbon sequestration that aligns with the State's climate goals.

Newlight was founded in 2003 to use greenhouse gas as a resource to make biomaterials that can replace plastic, helping to end plastic pollution and reduce the amount of carbon in the air. Specifically, Newlight has developed technology that uses naturally-occurring microorganisms to convert air and greenhouse gas into a carbon-negative PHB material called AirCarbon: a molecule made throughout nature that functions like plastic, but contains no synthetic plastics, is reusable, industrial[1] and home compostable[2], and certified by SCS Global Services and Carbon Trust as carbon-negative, on both a cradle-to-gate basis for material and cradle-to-grave basis for finished goods. Newlight also uses IBM blockchain tracking technology to track the carbon footprint of its AirCarbon-based products. Appreciating California's goal of achieving carbon neutrality, Newlight encourages the California Air Resources Board (CARB) to explore non-geologic forms of carbon sequestration and reduction through the scoping plan process as there are many new and developing technologies that are helping combat climate change.

A Naturally-Occurring Material: PHB

PHB (polyhydroxybutyrate) is a material made naturally by almost all known living things on Earth, including trees, flowers, fish, microorganisms, and the human body. PHB is made nearly everywhere life occurs, from the bottom of the Atlantic Ocean to the depths of the Amazon rainforest, and is produced to store energy. PHB is one of the oldest molecules on Earth, estimated to have come into formation over two billion years ago. Since PHB is a naturally-occurring energy storage material, and made throughout all of nature's ecosystems without the influence of humans, PHB has the unique characteristic that nature recognizes it as food: if left in nature, PHB is naturally consumed as an energy source by microorganisms in soil and water, similar to banana peels or leaves. Because PHB biodegrades in both anaerobic and aerobic environments, it can break down in a variety of disposal end points, including backyard compost, commercial composters, and anaerobic digestors.

Newlight's AirCarbon® PHB

[1] BPI certified, TUV OK compost INDUSTRIAL certified

[2] TUV OK compost HOME certified

AirCarbon is produced using naturally-occurring (non-GMO) microorganisms that consume air and greenhouse gas as their food source, and use it to produce PHB inside of their cells like muscle. The production of AirCarbon is a carbon-negative process, capturing or destroying more CO2e than was emitted to make it. Newlight works with independent third parties, such as SCS Global Services and Carbon Trust, to calculate its carbon footprint. Produced by replicating a process found in nature, AirCarbon is free from BPA, phthalates, and PFAS, is both reusable as well as readily biodegraded by living things as a food or energy source.

AirCarbon is a high-performance, carbon-negative, home compostable biomaterial that is being used to replace plastic in multi-billion-dollar industrial segments, from foodware to fashion. In 2020, Newlight brought its first vertically-integrated AirCarbon products to market, launching the world's first regenerative foodware and fashion brands. The company's foodware brand is comprised of AirCarbon cutlery and straws, and can be found in hundreds of locations across the US, including at Shake Shack, Target, Disney, Ben & Jerry's, and Sweetgreen. Newlight's fashion brand was launched to replace animal and synthetic leather, and has been featured in both Women's Wear Daily[3] and Vogue UK[4]. Newlight recently announced a partnership with Nike to use AirCarbon to help reduce the carbon footprint of Nike's products.

Newlight's mission is to help end plastic pollution and climate change by replacing plastic with AirCarbon: creating global-scale economic and environmental value. Newlight manufactures exclusively in North America, utilizing its patented, award-winning technology.

Using greenhouse gas as a resource to replace single-use plastic with AirCarbon presents numerous benefits, including: a reduction in greenhouse gas emissions, reductions in non-compostable and non-recyclable solid waste, and a decrease in plastic pollution.

Newlight expresses support for the State's policy leadership and CARB staff as they continue to develop and implement the scoping plan. We appreciate acceptance of our letter and are available to answer any further questions and provide additional information.

Sincerely,

Amy Mmagu
Director – California Government Affairs
Newlight Technologies, Inc.

[3] Roshitsh, Kaley. "EXCLUSIVE: Luxury Brand Captures Carbon in Air." Women's Wear Daily . Fairchild Media, September 24, 2020. https://wwd.com/fashion-news/fashion-features/covalent-luxury-captures-carbon-aircarbon-material-1234599222/.

[4] Emily Chan, "Would You Wear A Lab-Grown Leather Blazer?," Vogue UK (Conde Nast, November 14, 2020), https://www.vogue.co.uk/fashion/article/lab-grown-leather.