

VALUING NATURE-BASED SOLUTIONS TO CLIMATE CHANGE

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BACKGROUND

- The average carbon footprint in the world is about 4 tons/year (Nature Conservancy).
- The average carbon footprint in the U.S. is about 16 tons/year (Nature Conservancy).
- Carbon dioxide emissions are the primary driver in global warming and climate change. They remain of growing concern, creating an urgent call for action.
- Circular economies are developing across the world to restore the regenerative purpose of the commons.
- Ralph Chami, PhD.,. a policy expert, researcher, and professor, collaborated with other professionals to develop an economic model to help offer a solution for global warming and climate change.
- Dr. Chami and others created the Blue Green Future to help provide policy advice to spark change.
- Dr. Chami has developed the key components for a Win Win economic model in which the valuation of natural carbon sequesters takes place. Dr. Chami's economic approach is a market-based economic idea that goes beyond companies donating to goo causes and the current U.S. cap and trade carbon system. This building of this economy includes nature, rather than it being separate and susceptible to our footprint.
- With nature at the core of this model, the continual valuation
 of ecosystem services will create opportunity for industry to buy
 carbon credit to level off exceeding emissions in accordance with global
 climate goals.
- Those carbon credit dollars support local communities (the commons) to not only protect ecosystems services, but to increase carbon sequestration while creating jobs in local communities.

VALUING NATURE AND ECOSYSTEM SERVICES

- A model framework was applied to elephants and whales to show the value that keystone species have in the environment and for the economy.
- For example, whales are valued at 2 millions dollars through actions such as whale watching or their ability to sequester carbon through the "whale pump," biomass carbon and deadfall carbon.
- The value of nature extends beyond keystone species to plants, such as seagrass.

SOURCES

- "The Case for a New Economic Paradigm"
- Chami et al., 2020. On Valuing Nature-Based Solutions to Climate Changes: A Framework with Application to Elephants and Whales.
- What is your carbon footprint? The Nature Conservancy. (n.d.).
- Chami, R., Cosimano, T., Fullenkamp, C., & Nieburg, D. (1AD, January 1). Toward a nature-based economy. Frontiers.

What if we left Nature Alone?

THE +NATURE ECONOMIC PARADIGM SHIFT

The +Nature Coalition consists of 3 pillars:

Value Nature

- When left alone, nature performs ecosystem services that benefit the environment, like sequestering carbon dioxide. Nature creates habitats for species recovery, which can then benefit humans.
- For example, fish populations can be restored, benefiting humans by having more fish to catch.

Build Circular Economies

- Eliminate the need for waste disposal by find alternatives for items like single use plastics and forever chemicals.
- Circular economies allow for living, healthy ecosystems and their services to occur.
- Challenge policymakers and market makers to see the value of these living, healthy ecosystems.

Renew "the commons"

- Provide opportunities for businesses to invest their carbon credit dollars to protect and preserve nature.
- Create more "commons" that will be maintained by local communities and government to ensure monetary resources are used fairly.

Learn more about Dr. Chami, his colleagues, the +Nature Economic Model, Blue Green Future, and the work they do by scanning this QR to go to the website for Blue Green Future

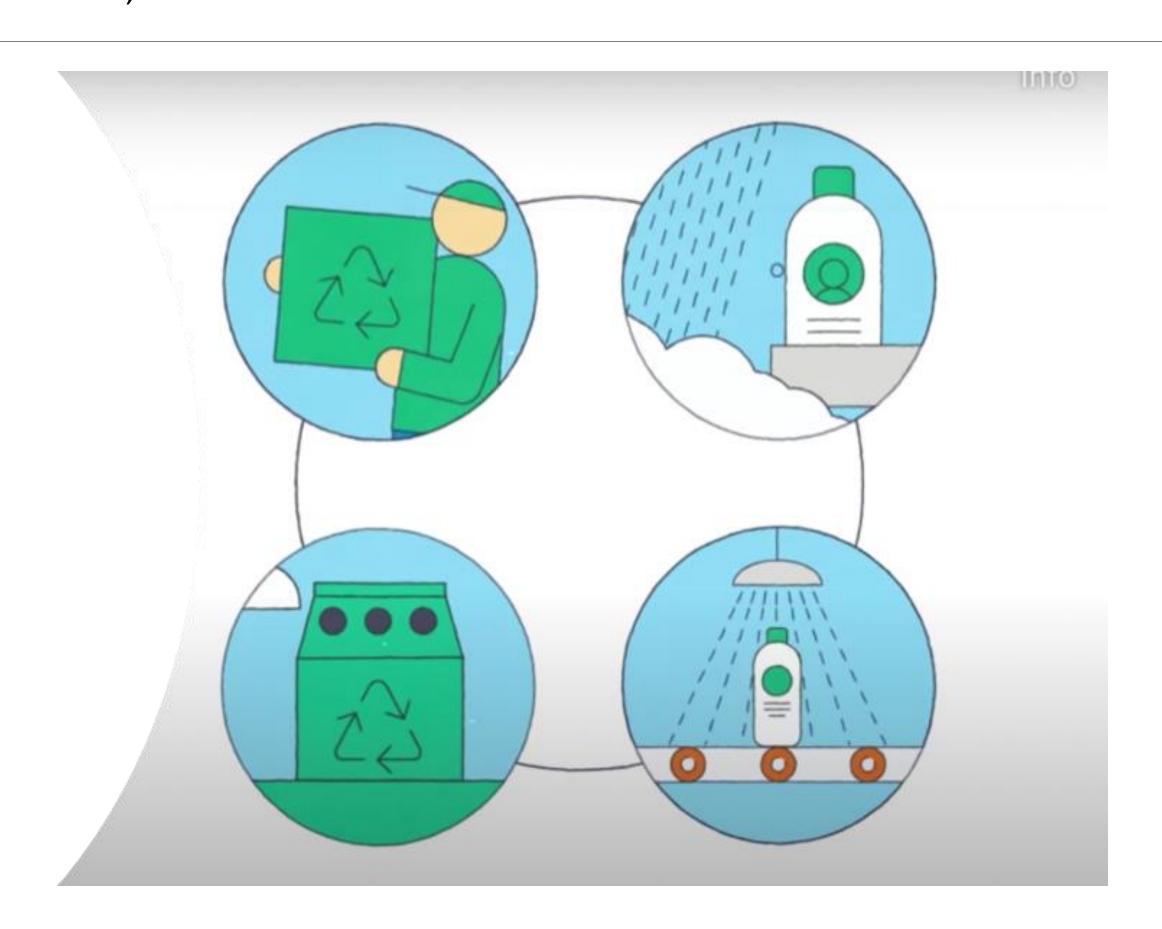




Scan the QR code to view Dr. Ralph Chami's full publication

CIRCULAR ECONOMY

- Economic approach to benefit businesses, society, nature, and the environment.
- A circular economy eliminates waste because items will be reused, recycled, or repurposed instead of disposed. A circular economy works to reduce the extraction of resources.
- Circular economies reduce extraction of finite resources and reduce the amount of waste ending up in nature whether it's in a landfill or the ocean, etc.



RENEWING "THE COMMONS"

- The commons is the cultural and natural resources accessible to all members of the surrounding community.
- The commons refers to resources like air or water.
- Examples include community gardens, land trusts, grocery stores ran as cooperatives, community Wi-Fi, and forests and fisheries maintained by local people.
- It is hard to have clear ownership over these natural resources.
- Carbon credit money can be investing into natural resources to preserve and protect ecosystems and the services they protect.

NEXT STEPS

- Carbon credit dollars already exist, there just needs to be more opportunity to invest them.
- Renewing the commons can be the opportunity by using the money to protect and preserve nature.
- Our goal is to create awareness of this idea through social media, promoting Blue Green Future,
- Reach a greater audience by promoting resources like Dr. Chami's TED talk:
 A New Era, etc.
- We hope to raise enough awareness to help begin offsetting carbon emissions.