



# Nature and Biodiversity in Practice:

## Bankable Nature Solutions as a biodiversity enabler

HKGFA Biodiversity Training Series #5:  
Case studies and insights  
12 June 2024



# Financing positive impacts

Annual finance flows with direct *positive* impacts on nature and climate

Total  
**\$200 billion**

Growth of  
private sustainable financing is critical

Public  
**\$165 billion**

Private  
**\$35 billion**

**Biodiversity  
& landscapes**  
46%

Agriculture,  
forestry & fishing  
25%

Water  
resources  
10%

Pollution  
abatement  
9%

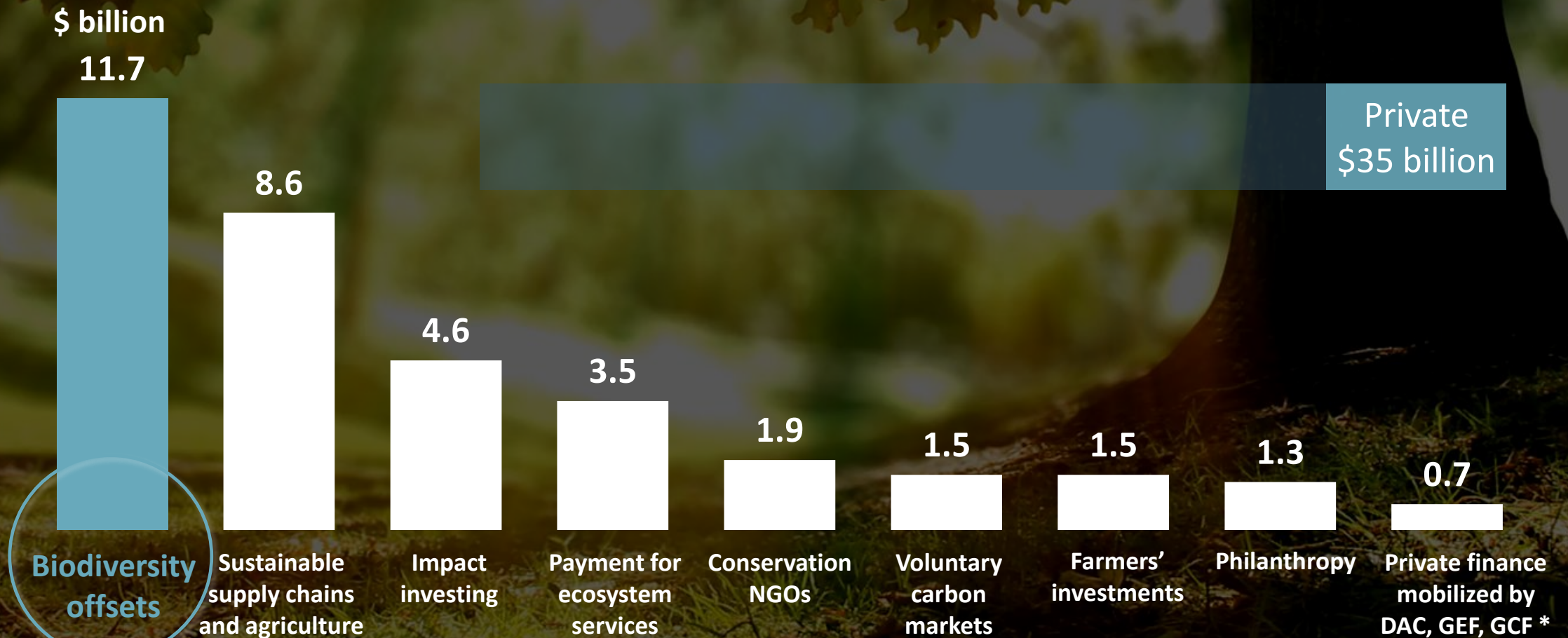
Environmental  
policy  
8%

Development  
assistance  
1%

Sources: [State of Finance for Nature 2023](#), UNEP; Seneca

# Private financing landscape

## By funding channel



\*DAC = Development Assistance Committee, GEF = Global Environment Facility; GCF = Green Climate Fund; Sources: [State of Finance for Nature 2023](#), UNEP; Seneca

# Before we get to a scalable biodiversity credit market...

## Commonalities between biodiversity credit and bankable nature solutions considerations



### Biodiversity outcome

A “biodiversity outcome” is measured as the difference between the scenario with project activities and without project activities, and because it is measured, it implies that the credit represents an outcome that has already been demonstrated.



### Measured and evidence-based

Methodologies will always include a measure of geographic area. In addition, methodologies must include multiple metrics of different aspects of biodiversity that describe a habitat’s condition, consisting of elements of structure, function, and composition.



### Durability

Durability refers to the quality of the credits which relate to the period for which the positive biodiversity outcomes of a project are maintained without being reversed.



### Additionality

Biodiversity outcomes must be additional to those that would otherwise occur without the project intervention.

Sources: Biodiversity Credit Alliance; Seneca

# Seneca in action – Building resilience

## Restoring natural landscape and empowering ethnic minorities

Seneca has been actively working with upland communities in northern Laos to promote nature conservation and drive investments that will improve the livelihoods of the indigenous population.

The region is home to the Hmong and Khmu ethnic minorities with a rich cultural heritage. Years of slash-and-burn agriculture have led to significant deforestation and biodiversity loss, which not only threaten the surrounding natural ecosystems, but also put the communities' livelihoods at risk.

Since 2014, a project has been under way to introduce sustainable coffee cultivation to the region to replace monocrop farming.

Agroforestry techniques have restored the landscape in a vast area, and the first coffee crops have been harvested in recent years. The quality of the product is a testimony to the potential of the region as a coffee production center.

Biodiversity is a key project consideration.

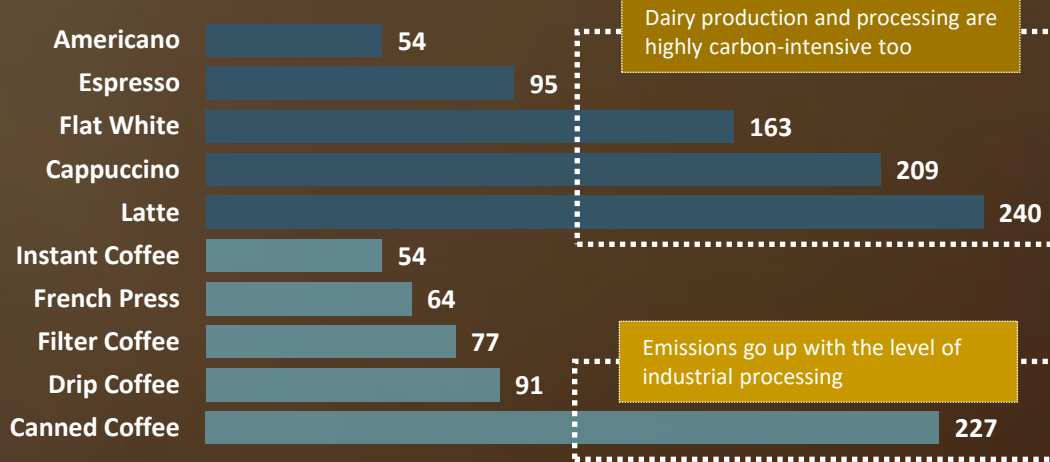
Photo © Uplao

Source: Seneca

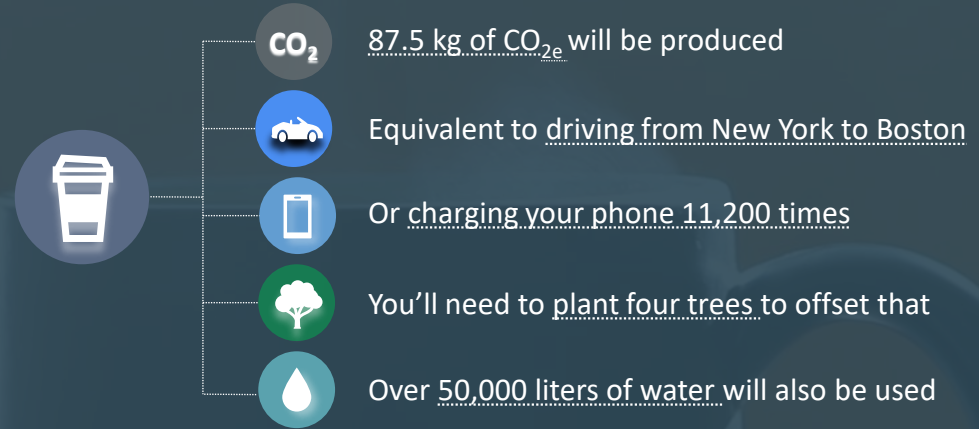
# Mitigating the coffee industry's environmental impacts

## Carbon footprint by coffee drink <sup>1</sup>

g CO<sub>2e</sub> / avg serving



## If you drink a cup of latte a day for a year...



## Environmental impacts of conventional industrial-scale coffee farms



### Deforestation

The removal of trees to increase the size of available coffee farmland could have grave environmental consequences.



### Loss of carbon sequestration

Leafy canopies sequester carbon from the atmosphere. Moving away from agroforestry could increase the amount of emissions released.

### Soil degradation

Trees' root systems filter water and hold the soil together by shielding it from heavy wind and rain. A decline in soil quality could result from extensive deforestation.



### Biodiversity loss

Forests provide natural habitats for animal, insect and plant species. Monoculture crops could substantially reduce biodiversity.

### Chemical pollution

Fallen leaves act as natural fertilizers. The use of chemicals pollutes the soil and local waterways. This may reduce soil fertility, alter soil acidity and be detrimental to natural life.



Sources: (1) [Omni Calculator](#); Seneca Impact Advisors

# Impact assessments

Seneca's impact framework is aligned with the global community's goals:

## IMPACT DASHBOARD

XYZ Corp | AGRICULTURE | SUSTAINABLE COFFEE

**70** mt CO<sub>2</sub>e

sequestered per hectare of agroforestry-based farmland

**3.5** kg CO<sub>2</sub>e

Scope 1/2/3 emissions throughout the supply chain per kg of coffee

**Zero**

chemical fertilizers and pesticides used on the farms

**\$7.5** million

accretion to smallholder farmer income over project life

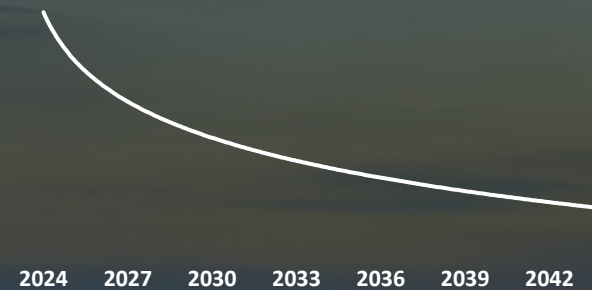
## SUSTAINABLE DEVELOPMENT GOALS

contributed to by the project



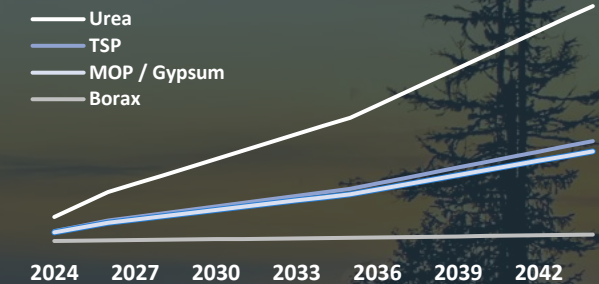
## CARBON SEQUESTRATION

Net mt CO<sub>2</sub>e sequestered



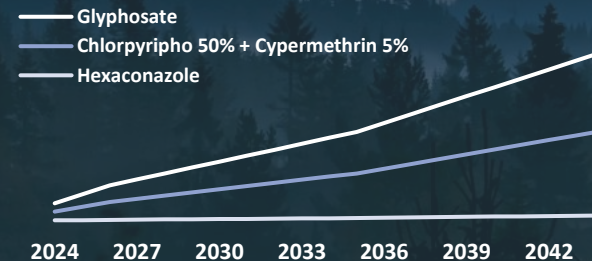
## CHEMICAL FERTILIZERS AVOIDED

mt / ha / year



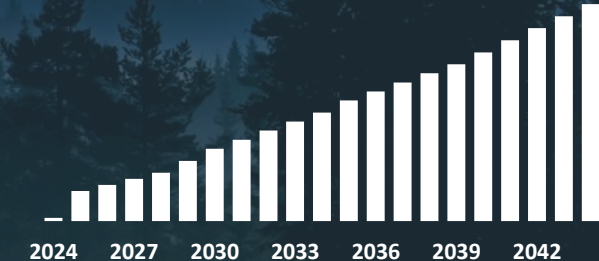
## CHEMICAL PESTICIDES AVOIDED

liter / ha / year



## SMALLHOLDER FARMER INCOME

\$ / year



Source: Seneca

# Fairtrade coffee

In addition to ensuring more favorable economics for smallholder farmers:

The producer implements biodiversity monitoring and implementation plans in compliance with Fairtrade coffee standards

- The EU's Biodiversity Performance Tool
- The Farmland Biodiversity Score

Sources: Fairtrade International; Seneca



# Seneca in action – Preserving marine biodiversity

## Tackling marine plastic pollution and serving remote communities

Seneca is leading financing efforts to incubate a project in the ASEAN region to convert plastic waste into fuel, at a scale that is both commercially viable and beneficial to remote communities that are underserved by traditional investment and financial aid channels.

Marine plastic pollution is a daunting challenge for Southeast Asian countries. Existing recycling programs help, but remain inadequate in the absence of a stronger incentive to galvanize action at the grassroots level.

Through innovative technologies and long-term partnerships with international stakeholders, we aim to materially enhance the value of plastic waste collection, while supplying a source of affordable fuel for isolated communities.

The project is unique in its geographical reach and innovative approach. The complexities involved call for a coalition of partners with the common goal to restore ocean ecosystems with sustainable financing.

Seneca will continue to play a central role.

Source: Seneca

# Seneca in action – Restoring ecosystems

## Preserving and restoring tropical forests, biodiversity and food supply

Seneca is exploring investment structures to enable the preservation of Indonesia's tropical forests, their biodiversity and food production potential.

NGOs and philanthropic foundations have laid the groundwork for much for these efforts. Through regenerative agroforestry techniques, considerable areas of land have been restored, providing a first layer of protection against soil degradation, flooding, biodiversity loss, and food supply shortages.

However, private-sector funding is critical to the programs' continued success. There are already viable commercial pathways, such as the sale of carbon credits and exports of palm sugar. The products produced will also comply with the EU's deforestation regulations.

By bringing together public and non-public institutions and private investors, Seneca aims to accelerate the project's momentum and deliver tangible benefits to the country's tropical forests and the surrounding communities.

Source: Seneca

# Key takeaways

## For policymakers, project owners and investors

- ✓ For the vast majority of companies and investors, biodiversity is a severely underinvested area
- ✓ Even without biodiversity credits, there are commercially viable solutions that promote biodiversity
- ✓ But biodiversity outcomes have to be well-defined, measurable, durable and additional
- ✓ A key issue is that project owners and stakeholders have to be properly incentivized
- ✓ One pathway is to encourage quality and not yield. Consumers have a strong willingness to pay if benefits are well articulated

Source: Seneca

# About Seneca Impact Advisors

**Seneca Impact Advisors** is a specialist advisory firm based in Hong Kong with extensive experience and networks in the Asia-Pacific region. It specialises in developing innovative financial solutions for scalable and commercially viable nature and climate positive projects. Seneca's aim is to mobilise private-sector capital to protect and restore nature.

Seneca was formed to bridge the financing gap between traditional conservation and private investment capital seeking returns. There is a growing amount of capital with a willingness to invest in nature-based projects with highly impactful and measurable outcomes. However, there have been few scalable and commercially viable projects to attract investment capital. By working with leading NGOs, environmentally passionate entrepreneurs, and ESG-concerned corporates, the team at Seneca has been successfully originating and developing projects to

meet the demand from funders. With enhanced public awareness about the climate crisis, biodiversity loss and resource depletion there is a significant amount of capital seeking nature and climate positive investments.

Structuring bankable projects requires knowledge of both conservation and investments. The team at Seneca combines its passion for the natural world with financial and technical expertise to help build commercially viable projects which contribute positively to the environment and society.



AGRICULTURE



FOOD



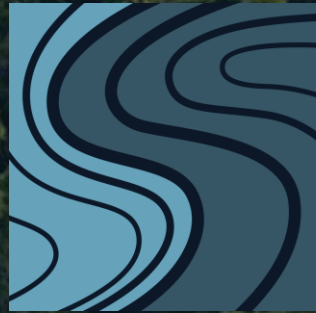
FORESTRY



FRESHWATER



COASTAL ECOSYSTEMS



**seneca**  
impact advisors