

Natural  
Climate  
Solutions  
Alliance

**The Natural Climate Solutions Lighthouses:**  
shining a light on the role of nature and people  
in delivering climate mitigation outcomes

## What are Natural Climate Solutions?

Natural Climate Solutions (NCS) are nature-based solutions that address climate change. They build on nature's capacity to remove and store carbon from the atmosphere and are among the most cost effective ways to significantly contribute towards global emissions reductions and GHG removal efforts.

NCS have the potential to remove over 100 gigatons of the projected 810 gigatons of CO<sub>2</sub> removals required by the end of the century to stay on the below 1.5°C pathway. Natural climate solutions are among our strongest possibilities for combating climate change, when deployed in conjunction with other decarbonization initiatives. They are also key to meeting the other central challenges of our era, protecting biodiversity and providing positive socio-economic benefits for people.

NCS take an integrated approach to these challenges and promote synergies by tackling both climate mitigation and adaptation challenges at relatively low

cost, while providing multiple additional benefits for nature and for people. This is what high-quality NCS means, integration of nature and people into a project or programme's climate change mitigation promises.

## What are NCS Lighthouses?

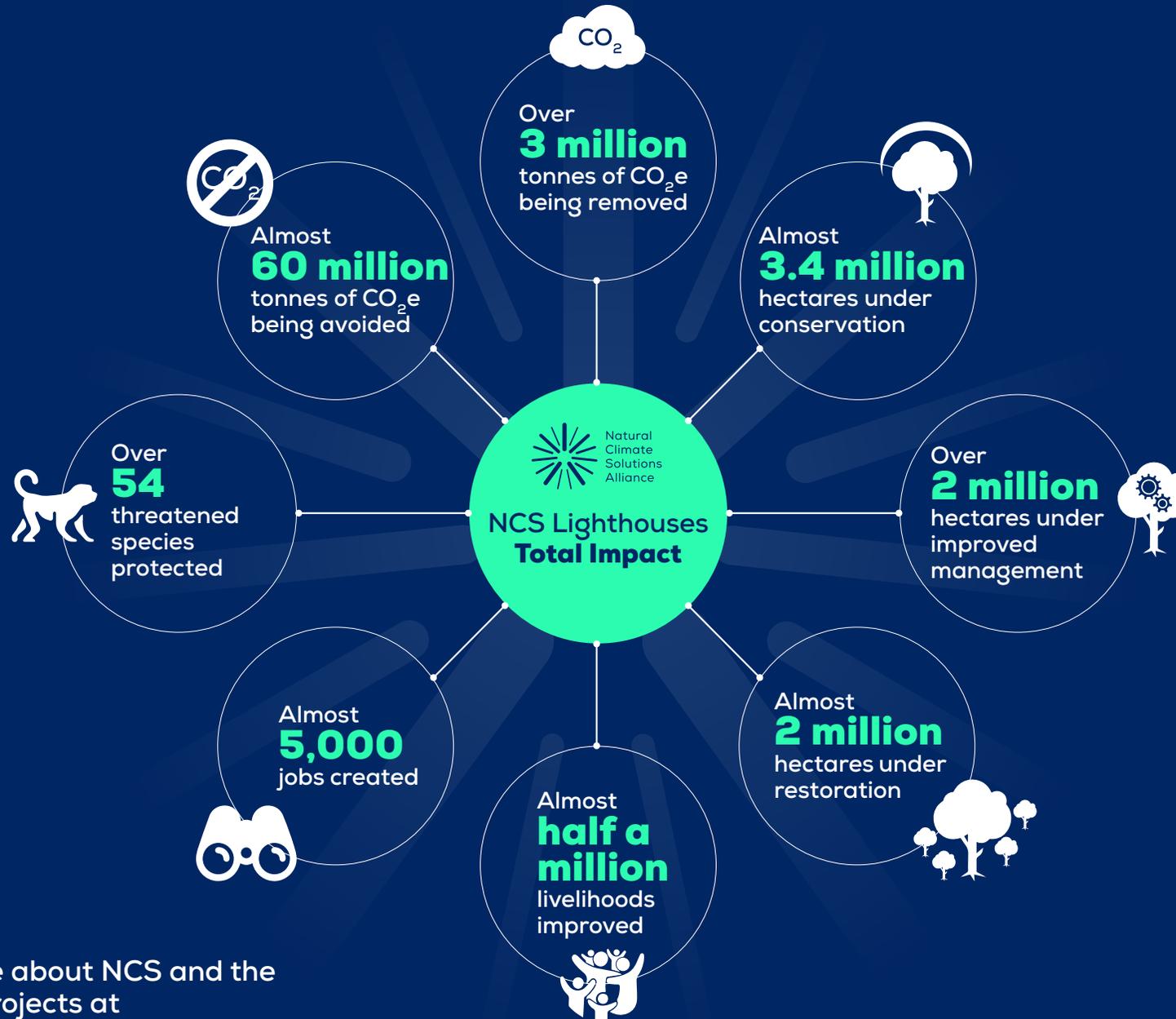
The [NCS Alliance](#) aims at catalysing the demand for high-quality NCS voluntary carbon credits, that is carbon credits generated through NCS interventions. These credits ought to be used exclusively to counterbalance annual unabated emissions. As part of this effort to scale up the demand for high-quality NCS credits, the NCS Lighthouse programme was established to build trust on these solutions by "shining a light" on projects that deliver high-integrity NCS carbon credits, generate biodiversity gains and provide substantive social and economic benefits for local communities and Indigenous Peoples. The NCS Lighthouses elevate the successful human, environmental

and climate stories behind NCS, highlighting examples that focus on mitigating environmental and social risks and generating positive environmental impacts and socioeconomic benefits.

The NCS Lighthouses, selected based on screening criteria developed by an NCSA Alliance Taskforce comprised of NGOs, businesses and solution providers, have demonstrated alignment to the NCSA's quality principles for NCS credits, as presented within '[Natural Climate Solutions for Corporates](#)'. Inclusion of an NCS project or programme in the NCS Lighthouse programme does not imply a recommendation to purchase, trade or retire credits associated with the Lighthouse.

So far, the NCS Alliance has collected 14 NCS Lighthouses. Each has its own peculiarities and specificities; all have generated climate change mitigation outcomes; biodiversity gains; and benefits for the local communities. The next pages illustrate the total impact the NCS Lighthouses have had to date in these areas.

# Impact to date across 14 Natural Climate Solutions Lighthouses



Find out more about NCS and the Lighthouse projects at [www.naturalclimatesolutionsalliance.org](http://www.naturalclimatesolutionsalliance.org)

November 2022

# NCS Lighthouses: projects with impact

To elevate the successful human, environmental and climate stories behind NCS around the globe, the [Natural Climate Solutions Alliance \(NCSA\)](#) highlights NCS examples focused on mitigating environmental and social risks and generating positive environmental impacts and socio-economic benefits. These are the [NCS Lighthouses](#).

	<a href="#">Kasigau REDD+ Project</a>	<a href="#">Northern Kenya Rangelands</a>	<a href="#">Laguna Om</a>	<a href="#">Nii Kaniti</a>	<a href="#">Makame avannah</a>	<a href="#">Ntakata Mountains</a>	<a href="#">Yaeda-Eyasi Landscape</a>	<a href="#">Carbon by Indigo</a>
<b>Region</b>	Kenya	Kenya	Mexico	Peru	Tanzania	Tanzania	Tanzania	USA
<b>Project Type</b>	REDD+	Agricultural Land Management	Conservation	REDD+	REDD+	REDD+	REDD+	Soil Enrichment
<b>Carbon Programme</b>	VCS + CCB	VCS + CCB	CAR*	VCS + CCB	VCS + CCB	VCS + CCB	Plan Vivo	CAR
<b>Area</b>	169,741 ha	1,993,075 ha	84,000 ha	127,004 ha	104,065 ha	216,000 ha	110,527 ha	2,023,428 ha
<b>Ecosystem</b>	Dryland Forest	Savannah	Tropical Rainforest	Tropical Rainforest	Savannah	Forest	Forest	Farmland
<b>Mt CO<sub>2</sub>e reduced or removed / yr</b>	1.5	1.4	0.42	0.56	0.14	0.55	0.17	0.02
<b>Biodiversity Benefits</b>	Over 15 HCV species protected including important endangered populations such as Grevy's zebra and African Wild dogs	9 species populations growing, including 4 of which are endangered	Preserves rainforest from deforestation, promoting restoration and conservation in areas with high biological and cultural value	5 threatened species protected including the jaguar, blue-headed macaw and tapir	Reduced deforestation across 364,000ha, 93% reduction in poaching, 13 threatened species protected, 5 critically endangered	1.25 million trees protected, 12 threatened species protected, 3 of which are endangered	Protects over 171,000 trees from deforestation. Wildlife numbers are improving with giraffe sightings increased by 68%.	Regenerative farming makes for more resilient and nutritious soil for healthier crops which need less chemical fertilizer and soil holds more water, reducing runoff and erosion.
<b>Social Benefits</b>	Project activity support 300 jobs and has increased water access for >50,000 people, 120 school projects and awarded >25,000 student bursaries	An initial \$15 million received for 14 conservancies, benefiting 175,000 people	500 livelihoods are supported, 35% of income is reinvested in climate action.	18 sustainable enterprises created or supported, 7 indigenous communities involved in the project and 32 women in management roles	\$900,000 for 5 Maasai communities, 14,900 people directly benefit	135 businesses started with microloans supported by revenue, 50% of businesses owned by women.	Carbon finance supports traditional hunter gatherer lifestyle of one of the last remaining communities like this in the world.	100% increase in price of carbon credits since first enrolment, working over 30 US states supporting regenerative farmers

	<u>Mai Ndombe REDD+</u>	<u>Conservation Coast</u>	<u>Katingan Mentaya Project</u>	<u>Rimba Raya</u>	<u>Sumatra Merang Peatland Project</u>	<u>Luangwa Community Forests Project</u>
<b>Region</b>	Democratic Republic of Congo	Guatemala	Indonesia	Indonesia	Indonesia	Zambia
<b>Project Type</b>	REDD+, A/R, IFM	REDD+	REDD, ARR, WRC	REDD+	ARR, WRC	REDD+
<b>Carbon Program</b>	VCS + CCB	VCS + CCB*	VCS + CCB	VCS + CCB* + SDVista*	VCS + CCB*	VCS + CCB
<b>Area</b>	300,000 ha	54,157 ha (expanding to 128,448 ha)	149,800 ha	65,000 ha	23,000 ha	1,037,000 ha
<b>Ecosystem</b>	Tropical Rainforest	Tropical Rainforest	Tropical Peatland	Peat Swamp Forest	Peatland Forest	Riparian Forest
<b>Mt CO<sub>2</sub>e reduced or removed / yr</b>	5.6	0.73	7.5	3.5	1.3	1.7
<b>Biodiversity Benefits</b>	Return of previously eradicated species, including elephants, leopards, and buffalo, as well as the recovery of critical Bonobos populations	Protection of the Mesoamerican Biological Corridor, which is vital habitat for 120 migratory birds	Protection of endangered species, including the Bornean orangutan and Sunda pangolin	Protects habitat for endangered species, including the Bornean orangutan	Protection of a high conversion priority region, including the Merang biodiversity corridor	Protects over 565 million trees from deforestation and conserves a major wildlife corridor
<b>Social Benefits</b>	Direct payments to 28 villages in the project area	Project activities support 487 jobs, 24% of which are held by women	Improves wellbeing and develops sustainable sources of income for 34 local communities	Employs 200 people, providing medical services to village members	Supports community development initiatives, including 100 jobs created	Activities support 217,000 community beneficiaries across 12 Chiefdoms

\*Components of this project are still under verification.  
A/R = Afforestation/Reforestation  
ARR = Afforestation, Reforestation and Revegetation  
CCB = Climate, Community and Biodiversity Standards  
ha = hectares

CAR = Climate Action Reserve  
IFM = Improved Forest Management  
Mt CO<sub>2</sub>e = million tonnes of carbon dioxide equivalent  
REDD = Reducing emissions from deforestation and forest degradation

SDVista = Sustainable Development Verified Impact Standard  
VCS = Verified Carbon Standard  
WRC = Wetlands Restoration and Conservation  
1 tonne CO<sub>2</sub>e = 1 credit

To read the stories behind the stats and find out more about the Lighthouse projects [click here](#).

