Once there were six trillion trees on our planet. Now there are only three trillion — and ten billion trees are still lost every year. This is leading to a changing climate, shrinking habitat for wildlife, and harder lives for billions of people. Protecting and restoring one trillion trees can reverse these trends and create a world where forests are expanding, not shrinking — with benefits for all.

Trillion Trees is a long-term partnership between three of the world’s largest conservation organisations: BirdLife International, WCS and WWF-UK. It is founded on an ambitious vision: that by 2050, through collective action by all sectors of society, one trillion trees have been restored, saved from loss, and better protected around the world. But beyond being ambitious, research has demonstrated that the Trillion Trees vision is both achievable and necessary. Trillion Trees centers on three core approaches: improved protection of the world’s remaining forests; reduced deforestation to keep forests standing; and the restoration of forest landscapes, to return the right trees to the right places. Achieving the vision requires action on the ground at the scale of landscapes, countries and regions as well as sectoral and policy reform to accelerate global efforts and enable others to act.

The main focus of the partnership is to help connect funders with forest conservation ventures, providing direct support and leveraging additional finance for investable projects. The partners behind Trillion Trees work in around 120 countries, but have a number of landscapes where they focus efforts to demonstrate and pilot what’s possible — largely in the tropics, where current rates of deforestation are highest and some of the greatest gains for climate and nature can be made. For example, as of 2019, the Trillion Trees partners have helped the government of Colombia set up an innovative finance mechanism to direct carbon tax revenue to the expanded protected area network. In Sierra Leone they have supported smallholder farmers to produce deforestation free Gola Rainforest Chocolate. In Tanzania they are helping the Tanzania Forest Service to restore degraded forest reserves in the southern highlands and coastal forests. In Madagascar they have been delivering carbon finance to local communities engaged in community based management of the buffer zone of Makira, a forested national park, and in Indonesia they have convened a coalition of international commodity companies in a landscape initiative to reduce coffee-related deforestation in the Bukit Barisan Selatan National Park.

Forest loss has a double impact on the climate. It releases stored carbon into the atmosphere and, in addition, reduces the planet’s ability to sequester carbon emissions from other sources. To deliver on our global climate targets, it is not enough to simply aim for a world with zero deforestation. Humanity must find a way to return tree cover in many of the places where it has been removed, eventually leading to a net increase above present day levels.

This is all the more pertinent given the large gap between
current emission reduction targets and what is needed to deliver on the Paris Agreement goals. The annual emissions gap in 2030 will be 13-15 gigatonnes of CO₂e. Multiple reports and analyses — most recently the IPCC special report on climate change and land — have highlighted reforestation, afforestation and avoided deforestation as among the most cost-effective and large-scale solutions that should be further exploited.

Analysis for the TT partnership revealed how each of the three core Trillion Trees approaches contribute towards the vision of one trillion trees restored, saved from loss, and better protected and support natural climate solutions. Restoration through tree planting and natural regeneration could contribute around 360 billion mature new trees, halting forest loss could save up to 170 billion trees at imminent risk of destruction and improved protection could sustain forests representing over half a trillion trees. Of course, even larger numbers need to be under improved protection to address the increasing threats facing the world’s forests and newly restored forest landscapes also need be protected to be secured into the future.

Restoration at the scale of 360 billion trees could lock up an estimated 36-50 gigatonnes of carbon by the time these forest areas reach maturity. For context, human-caused carbon emissions are currently between about 9-12 gigatonnes per year. This is a major opportunity that could significantly close the net annual emissions gap through extracting carbon from the atmosphere. On top of this the Trillion Trees vision would deliver huge emissions savings from avoided deforestation and the continued carbon sequestration of healthy, better protected forests. Moreover, forests also provide significant climate benefits beyond avoiding and removing greenhouse gas emissions. For example, they play an important role in regulating climate locally by cooling the Earth’s surface and regulating rainfall patterns, and play a huge diversity of roles in supporting local livelihoods and human wellbeing.

As long-term mitigation policy ramps up afforestation efforts, it is crucial that the global community moves away from monoculture plantations to more diverse practices that enhance the functional resilience of ecosystems in general. Moreover, the restoration of natural ecosystems and native species is key, but livelihoods must be balanced: efforts to grow other trees for food, fuel, timber and other products provide a living and help reduce pressure on natural forests.