

Juma Sustainable Development Reserve

Rainforests are the lungs of the earth. Clearing forests causes more carbon emissions than all the world's cars, trains, trucks and SUVs combined.

– Brazilian National Institute for Space Research (INPE)

Marriott's Environmental Goals

As global travel increases, Marriott has an obligation to ease our business impact on the natural environment while offering our communities an opportunity for a better and more sustainable future. Marriott's investment in the Juma Sustainable Development Reserve in Amazonas, Brazil addresses one of the company's key [long term sustainability goals](#):

▶ Invest in innovative conservation initiatives including rainforest protection and water conservation.

Marriott Helps Preserve the Amazon Rainforest



Chairman and CEO Bill Marriott with (l) Virgilio Viana, executive director of the Amazonas Sustainable Foundation and (r) Eduardo Braga, (former) Governor of the state of Amazonas.

In 2008, Marriott signed an agreement to partner with the Government of Amazonas in Brazil and the [Amazonas Sustainable Foundation \(FAS\)](#) to protect and preserve 1.4 million acres (589,612 hectares) of endangered rainforest in the Amazon, an area called the Juma Sustainable Development Reserve. Marriott committed US\$ 2 million to support the Juma Reserve - a [Reducing Emissions from Deforestation and Degradation \(REDD\) project](#) administered by FAS - in order to prevent deforestation of the Reserve and the subsequent release of 189 million tons of carbon dioxide into the atmosphere, while providing an improved quality of life for the Reserve's residents.

Tropical Rainforests: *Guardians of Planet Earth*

- Rainforests **absorb vast quantities of carbon dioxide** and through photosynthesis, convert it into clean, breathable air, **thus slowing the rate of climate change.**
- The Amazon rainforest **contributes to the distribution of rain** in the entire southeastern area of South America as well as Central and North America and also **helps moderate temperatures.**
- **One fifth of the world's fresh water** is in the Amazon River Basin.
- **One in ten species found on earth** lives in the Amazon, the largest rainforest in the world.

Key Project Elements

Healthier Planet

- Marriott advocates for REDD as a financial incentive (through the eventual sale of carbon credits) and model for countries to reduce greenhouse gases, conserve biodiversity and provide poverty alleviation.

Compensation for Protecting the Rainforest

- The Juma project provides education, medical care, employment and a monthly “[Bolsa Floresta](#)” stipend for the nearly 2000 local residents (nearly 500 families) who are trained and compensated to protect the rainforest.
- Residents receive training and infrastructure to pursue sustainable livelihoods, such as Brazil nut and fruit tree harvesting and chicken farming.

Advocacy and Fundraising

- Marriott works with its partners, guests, employees, non profit partners and governments to promote protection for our planet, rainforests and communities.

Key Results to Date

Healthier Planet

- According to Brazil’s National Institute for Space Research, which monitors deforestation in Brazil, the Juma Reserve has lost only 1.2 percent of its forest from 1988 to 2012.
- The Juma region has been identified as one of the areas of greatest interest for biodiversity conservation in the Amazon; hundreds of species identified and protected within Juma, including a dozen that are endangered.

Validation and Recognition of the Juma REDD project methodology

(Note: VCS and CCBA are currently the most used standards for design validation of REDD+)

- FAS is pursuing Verified Carbon Standard (VCS) certification for the Juma REDD project this year and is expected to be recognized as a REDD+ (Reducing Emissions from Deforestation and Forest Degradation plus conservation, sustainable forest management, and enhancement of forest carbon stocks).
- Juma is the first REDD initiative in the world validated to the standards of the [Climate, Community, and Biodiversity Alliance](#) (CCBA) that secured “Gold Level,” the highest level of certification.
- Juma was verified by Munich-based [TÜV SÜD Industrie Service GmbH](#), an independent organization accredited by the United Nations Framework Convention for Climate Change.

Brazil nut cultivation is traditional to Juma and both a sustainable source of income and incentive to help protect the surrounding forests. Marriott has helped provide local residents with training and infrastructure to increase Brazil nut harvests and profit.



Juma’s Brazil nuts are sold to outlets including Sam’s Club and Marriott’s Renaissance São Paulo Hotel.

Compensation for Protecting the Rainforest

- **Most Juma residents now have an income at or above Brazil's average minimum wage.** Thanks to a Bolsa Floresta monthly stipend and new methods of sustainable income generation (Note: more than half of Juma's residents had income below minimum wage when project started; Brazil's average minimum wage is R\$ 545, or about US\$ 308, paid 13 times per year).
- **Over 40 sustainability workshops/training provided.** This includes classes focusing on permaculture (sustainable agricultural system that encourages use of foods that are grown naturally within the area) and native seed collection (seeds from a variety of Amazon trees and plants are later stored for future study and planting projects on degraded lands)
- **Local residents continue to pursue sustainable livelihoods.** Activities include a Brazil nut cooperative, growing fruit, and raising chickens.
- **Boa Frente community now has an organic garden.** This new resource helps feed local students and now includes beehives to help pollinate the garden.
- **Seven schools/classrooms and 2 Conservation and Sustainability Centers have been constructed.**
- **Over 600 students (ages 9-15) are attending primary and middle school.**
- **Over 300 homes have access to drinkable water.**
- **Over 1,800 residents have access to light.** Four solar panels have been installed and are used by the schools to supplement electricity provided by donated generators.
- **Ten+ houses refurbished with metal roofs.** Traditionally, local residences are made of wood with roofs made of palm thatch or asbestos panels.
- **Over a dozen communities surrounding the Boa Frente Conservation and Sustainability Centre have access to local and remote (via skype) medical assistance; 2 fast boats purchased to help transport residents to a nearby hospital in case of emergency.**
- **Decrease in disease since the project started.** This includes malaria, diarrhea, verminosis, malnutrition, flu and hypertension.
- **11 computers with internet access provided** (Boa Frente community).



Marriott recently fulfilled Juma villagers' request for over 1000 chickens, which they will use to both generate sustainable income and feed their families.

Advocacy and Fundraising

Advocacy

- At the 2013 World Economic Forum Latin America meeting in Lima, Peru Marriott supported the Amazonas Sustainable Foundation's participation in a panel on rainforest preservation.
- In 2012, we unveiled a case study of the Juma REDD project at the United Nations Environmental Conference Rio +20 in Rio de Janeiro. Marriott sponsored the study and the event, which was held at the JW Marriott Hotel Rio de Janeiro.
- Marriott also joined with the Amazonas Sustainable Foundation and the State of Amazonas, Brazil to present the Juma Reserve REDD project as an effective model for mitigating climate change at United Nations Climate Conferences in Cancun and Copenhagen.



An aerial view of the town of Boa Frente in the Juma Reserve, and the Samuel Benchimol Conservation and Sustainability Center, which includes the J.W. Marriott, Jr. school, a medical center, a digital library, a sustainable garden, an outdoor forest studies house, dormitories and dining room/kitchen.

- Marriott has advocated for government support of rainforest preservation projects. Marriott was a founding signatory to the Tropical Forest Climate Unity Agreement submitted to the U.S. Congress by Avoided Deforestation Partners in May 2009.

Fundraising

- Renaissance São Paulo Hotel started a campaign last year to donate 1 Brazilian real (BRL) for every lunch sold at the hotel restaurant to support Juma. Since October 2012 nearly BRL 15,000 (nearly \$7,000) has been raised and donated to Juma. We are exploring expanding this to other hotels, including the JW Marriott Rio de Janeiro.
- To date, Marriott has raised nearly \$300K for the Juma Reserve through its partners, guests, green meetings promotion and employees.



Residents from Juma's Boa Frente community, one of over 30 communities within the Juma Reserve.

Guardians of the Rainforest

As most deforestation starts alongside roadways, the Juma Reserve, located near two highways, is vulnerable to agriculture, ranching, mining and logging interests. Residents receive training and compensation to protect and serve as "guardians of the rainforest." Along with FAS staff, they implement an Environmental Management Program by monitoring critical transportation routes using boats and vehicles, remote sensing devices, four telecommunications bases and regular patrols on foot. Satellite monitoring is managed by the Brazilian National Institute for Space Research (INPE).

Awards

- Juma received the Rainforest Alliance's Eco-Index® award for "Best Lessons Learned" in April 2012.
- The Amazonas State Research Support Foundation provided grants to 25 Juma community members in October 2010 to conduct rainforest research that will ultimately help demonstrate the nutritional, medical and economic benefits of rainforest protection.
- The World Travel & Tourism Council (WTTC) awarded its 2009 Tourism for Tomorrow Award for Sustainability to Marriott International for its sustainability initiatives featuring the Juma Sustainable Development Reserve REDD project.

Juma update as of October 2, 2013