### Ecosystem Marketplace





















The second of the second

#### **Donors and Sponsors**

This report is public and freely available due to the financial contributions from Ecosystem Marketplace Donors: the United Nations Development Program and the Global Environment Facility; as well as our Premium Sponsors: Commission for Environmental Cooperation, New Forests; and Sponsors: Markit, eftec, USDA Forest Service - International Programs, the Nature Conservancy, and the Grantham Foundation.

#### Disclaimer

Ecosystem Marketplace is a project of Forest Trends. Any reference to Forest Trends or Ecosystem Marketplace in this disclaimer includesForestTrends,EcosystemMarketplace, and all of their respective affiliates, partners, officers, directors, and employees.

The information in this report is provided for general informational purposes only, and should not be construed to contain legal, business, accounting, tax, or other professional advice. No one should act or refrain from acting on the basis of any information contained in this report without seeking appropriate professional advice based on his or her particular circumstances. The information contained within is the responsibility of the authors and contributors, and does not necessarily reflect the views of the donors, sponsors, or contributors of the report.

While Ecosystem Marketplace strives to provide accurate and timely information, all information in the report is presented "as-is," without any representation as to its accuracy, suitability, timeliness, completeness or continued availability.

#### Acknowledgements

The following pages represent a compilation of the resources, insights and knowledge of dozens of individuals. They include: Dr. Naoki Adachi, Ricardo Bayon, Todd BenDor, Michael Bennett, Steve Bosak, Andrew Bovarnick, Rafael Burgos, David Brand, Susie Brownlie, Curtis Chullick, Sally Collins, David Cooley, Michael Crowe, Marianne Darbi, Maria del Mar Zavala, Tim Dendy, Craig Denisoff, Michelle Desilets, Melissa Dixon, Andrew Dodd, Marta Echavarria, Christopher K. Fong, Jessica Fox, Toby Gardner, Todd Gartner, Juan Carlos Gonzalez, Ben Guillon, Tom Hammond, MaryKate Hanlon, Al Hanson, Stephen Harris, Tommie Herbert, Cassie Hoffman, Marian Honeczy, Brad Jakowyna, Martin Juniper, George Kelly, Rebecca Kihslinger, Kristine Koster, Valerie Layne, Daniela Lerda, Patrick Maguire, Edward Maillett, Steve Martin, Rodrigo Martínez, Betsy McCorkle, Bruce McKenney, Deblyn Mead, Alex Moad, Brian Monaghan, Ivo Mulder, Carlos Muñoz Piña, David Nicholson, Holger Ohlenburg, Artur Paiva, Patricia Pérez, Bob Pett, David Primozich, Sarah Prinsloo, Jason Quigley, Jeannicq Randrianarisoa, Ramsay Ravenel, James Remuzzi, Cara Roderick, Talia Romero Jurado, Alice Ruhweza, Ken Sanchez, Joanna Silver, Jon Soderberg, Eric Sprague, Theo Stevens, Kerry ten Kate, Phuc Xuan To, Al Todd, John Tynan, Katrina Valerio, Amrei Von Hase, Dr. Steven Ward, Wayne White, Jessica Wilkinson and Kristine Young. Thank you also to the entire staff of Forest Trends for your continued support and contributions.

Cover & layout by Wenceslao Almazan.



### State of Biodiversity Markets:

Offset and Compensation Programs Worldwide

#### **Preferred Citation**

Madsen, Becca; Carroll, Nathaniel; Moore Brands, Kelly; 2010. State of Biodiversity Markets Report: Offset and Compensation Programs Worldwide. Available at: <u>http://www.ecosystemmarketplace.</u> <u>com/documents/acrobat/sbdmr.pdf</u>

#### Contributors

Ian Dickie (eftec); Matthew Cranford (Department of Geography and Environment, the London School of Economics; and eftec associate); Michelle Gane (Institute for Sustainable Resources, Queensland University of Technology)

#### About Ecosystem Marketplace

Ecosystem Marketplace, a project of the non-profit organization Forest Trends, is a leading source of information on environmental markets and payments for ecosystem services. Our publicly available information sources include annual reports, quantitative market tracking, weekly articles, daily news, and newsletters designed for different payments for environmental services stakeholders. We believe that by providing solid and trustworthy information on prices, regulation, science, and other market-relevant issues, we can help payments for ecosystem services and incentives for reducing pollution become a fundamental part of our economic and environmental systems, helping make the priceless valuable.

Ecosystem Marketplace 1050 Potomac St., NW Washington, DC 20007 info@ecosystemmarketplace.com www.ecosystemmarketplace.com www.forest-trends.org

## Introduction

#### To the Readers

As more and more governments and businesses consider market-like instruments as tools for biodiversity footprint management, it is increasingly important to understand what is happening, where, and how those tools work. It is also critical to provide reliable information free to the public to enable all market participants to make more informed decisions, learn from the experiences of others, and ultimately allow stable, equitable and effective conservation markets to develop. To address this compelling need for more and better information we have written this status and trends report on biodiversity markets. Within the broad spectrum of 'biodiversity markets,' we aim to provide a succinct answer to the question 'What is happening in biodiversity offset and compensation programs around the world?'

There are both mature and nascent payment systems for biodiversity compensation around the world. Each one is a bit different and they often go by different names: biodiversity offsets, mitigation banking, conservation banking, habitat credit trading, fish habitat compensation, complementary BioBanking, remediation, conservation certificates, and many more. Some are based on compliance with regulation while others are done voluntarily for ethical, competitive, or pre-compliance reasons. But they are all efforts to reduce biodiversity loss and build the cost of biodiversity impacts into economic decisions through markets or marketlike instruments and payments.

Michael Jenkins President, Forest Trends

While a 'biodiversity offset' program may be preferable from an ecological and social standpoint, more flexible and less arduous forms of impact compensation, in which funds are set aside for biodiversity management or valuable biodiversity is protected elsewhere, can be a first step towards better biodiversity footprint management or even eventually a regulated offset system. It is this movement towards better compensatory mitigation and effective payments and markets for mitigation that is of interest to the report.

To meet those ends, this report provides the status and trends of biodiversity offset and compensatory mitigation programs by geographical region. In each section, the report summarizes the total active programs and developing activities, and broad metrics like total known payments and land area protected or restored. In each region, we also analyze the characteristics of offset programs—what drives the program, how offsets are created, who the buyers and sellers are, and what the unit of credit is. Finally, we look at recent developments in nascent and existing programs in the region.

The reliable, consistent and transparent information provided in this report will enable both experienced and new market participants to make more informed decisions and learn from the experience of others; ultimately allowing fair, stable and transparent conservation markets to develop.

Vatherine E Hamilton

Kate Hamilton Director, Ecosystem Marketplace

#### List of Acronyms and Abbreviations

ABP	Associated British Ports	
BBOP	Business and Biodiversity Offsets Program	
BCC	BiodiversityConservationCertificates(Malaysia)	
BLM	Bureau of Land Management (US)	
BTAU	Biodiversity Technical Assistance Units	
CA DFG California Department of Fish and Game		
CBD	Convention on Biological Diversity	
CONAB	IO Comision Nacional para el Conocimiento y Uso de la Biodiversidad (Mexico)	
CONAFOR Comisión Nacional Forestal (Mexico)		
DbD	Development by Design (TNC)	
DFO	Department of Fisheries and Oceans (Canada)	
EEAA	Egyptian Environmental Affairs Agency	
EIA	Environmental Impact Assessment	
ELD	Environmental Liability Directive (EU)	
ELI	Environmental Law Institute	
EM	Ecosystem Marketplace	
EMP	Environmental Management Plan (Mexico)	
EPBC	Environmental Protection and Biodiversity Conservation Act (Australia)	
EPE	$\label{eq:environmentalProtectionEnactment} Environmental ProtectionEnactment(Malaysia)$	
ESA	Endangered Species Act	
ESC	Environmental Services Certificate (Paraguay)	
ESIA	Environmental and Social Impact Assessment	
EU	European Union	
EVC	Ecological vegetation class (Australia)	
FCA	Fundo de Compensação Ambiental (Brazil)	
FOIA	Freedom of Information Act (US)	
HADD	Harmful alteration, disruption or destruction (Canada)	
HCT	Habitat credit trading (US)	
HCV	High Conservation Value	
ICMBio	Instituto Chicho Mendes de Conservação da Biodiversidade (Brazil)	
IDEA	Instituto de Derecho y Economía Ambiental (Paraguay)	
IFC	International Finance Corporation	
ILF	In-lieu fee	
IMR	Impact Mitigation Regulations (Germany)	
INE	Instituto Nacional de Ecología (Mexico)	
INFOR	Instituto Forestal (Chile)	
IPBES	Intergovernmental Platform on Biodiversity and Ecosystem Services	
IPCC	Intergovernmental Panel on Climate Change	

IUCN	International Union for the Conservation of Nature	
LGA	Ley General del Ambiente (Argentina)	
LGEEPALey General de Equilibrio Ecológico y Protección al Ambiente (Mexico)		
LOTs	Large old trees (Australia)	
LPNMA Lei da Política Nacional do Meio Ambiente (Brazil)		
MHHC	Manitoba Habitat Heritage Corporation	
NEMA	National Environmental Management Act (South Africa)	
NGO	Non-governmental organization	
NMFS	National Marine Fisheries Service (US)	
NOAA	National Oceanic and Atmospheric Association (US)	
NSW	New South Wales (Australia)	
NSW D	ECCW NSW Department of Environment, Climate Change and Water	
OEM	Office of Environmental Markets	
PAE	Plan d'Action Environnementale (Madagascar)	
PEMEX Petróleos Mexicanos		
PES	Payments for Ecosystem Services	
PRC	People's Republic of China	
PROFEPA Procuraduría Federal de Protección Ambiental (Mexico)		
PVP	Property Vegetation Plan (Australia)	
QMM	QIT Madagascar Minerals	
REDD Reducing Emissions from Deforestation and Degradation		
RVMC	Regional Vegetation Management Code (Australia)	
SANBI	South African National Biodiversity Institute	
SEB	Significant Environmental Benefit (Australia)	
SEMARNAT Secretaría de Medio Ambiente y Recursos Naturales (Mexico)		
SNUC	Sistema Nacional de Unidades de Conservação (Brazil)	
TNC	The Nature Conservancy	
UCTF	Uganda Conservation Trust Fund	
US ACI	E US Army Corps of Engineers	
US EPA	US Environmental Protection Agency	
US FWS US Fish and Wildlife Service		
UWA	Uganda Wildlife Authority	
WCS	Wildlife Conservation Society	

WWF World Wildlife Fund

# **Table of Contents**



Introduction	i
Biodiversity Markets	iv
Executive Summary	vii
Background, Scope & Methods	1
North America	7
United States - Wetland and Stream Mitigation	9
United States - Conservation Banking (Species)	
US - Other Offset Programs	
Canada	
Mexico	
Central & South America	29
Brazil	
Colombia	
Paraguay	
Developments	
Africa	33
South Africa	
Uganda	
Madagascar	
Other Countries	
Europe	37
Existing Programs	
Developments	
Asia	43
Existing Programs	
Developments	
Australia & New Zealand	47
Victoria	
New South Wales	
South Australia	
Queensland	
Western Australia	
Tasmania	
New Zealand	
Developments	
World Trends	59
References	63

# Mapping the World's Biodiversity Markets



### 预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5\_13422

