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The global environment sector is growing rapidly, as is the scale of the issues that face the environment itself. The global population is estimated to exceed 9 billion by 2050. New patterns of consumption threaten natural resources, food and energy security and cause pollution and climate change.

Policy makers and investors are responding to this in terms of supporting green technology as well as developing diverse regulatory and policy measures which move society in a more 'sustainable' direction. More recently, there have been moves to integrate environmental policy into general policy areas rather than having separate environmental policy. This approach is called Environmental Policy Integration (EPI).

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Brian Joseph McFarland

Conservation of Tropical Rainforests

A Review of Financial and Strategic
Solutions

palgrave
macmillan

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Windham, NH, USA

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“At first I thought I was fighting to save rubber trees, then I thought I was fighting to save the Amazon rainforest. Now I realize I am fighting for humanity.”
—Chico Mendes

I would like to dedicate this book to my family and friends—particularly my son Attila, my wife Brigitta, my dad Joseph, my mom Tamara, my brother Trevor, my brother-in-law Dani, and my mother-in-law Eva—for all their love and support.

I would like to share a special dedication with my son Attila: when you are older, I hope that we, as humanity, have come up with the solutions to save tropical rainforests and mitigate global climate change and allow you to see in person all the wonderful animals that I used to read to you about. I wish the same for my future niece Adrian and my goddaughter Olivia.

I would also like to thank my former teachers Dan Bisaccio, Christopher Brooks, and Dr. Joseph Domask and the School for Field Studies for teaching me about the natural world, teaching me how to be an analytical thinker, and opening up my mind to a world of travels and adventures.

I would like to thank my hardworking colleagues at Carbonfund.org, particularly Jarett Emert, Linda Kelly, and Suzie Kaufman, and a particular thank you to Carbonfund.org's President and Founder Eric Carlson, along with Carbonfund.org's Chairman Paul Rowland, for all the opportunities that have been provided to me over the last 10 years at Carbonfund.org.

I would also like to say thank you to Gabriel Thoumi for all his hard work editing this book and thoughtful conversations since the day I first met him. I truly appreciate the time and effort of Jan McAlpine for writing the foreword, along with the kind endorsements by Dan Bisaccio, Scott Settelmyer (CFA, CPA), and Steven V. Soranno (CFA, CAIA).

Thank you Justin Taberham for making this book possible by connecting me with Palgrave Macmillan. Likewise, thank you to the entire team at Palgrave Macmillan for their dedication and support, particularly Chloe Fitzsimmons, Jack Redden, and Rachael Ballard. In addition, I would like to thank the team at SPi Global for their exceptional help during the copyediting and production stages.

Last, but certainly not least, I would like to dedicate this book to the world's conservationists and especially all of those who sadly were assassinated fighting to conserve forests and secure human rights:

- *Wilson Pinheiro (1980)*
- *Joy Adamson (1980)*
- *Dian Fossey (1985)*
- *Vicente Canas (1987)*
- *Francisco Alves (“Chico”) Mendes Filho (1988)*
- *George Adamson (1989)*
- *Theodore Albert “Ted” Parker III (1993)*
- *Alwyn Howard Gentry (1993)*
- *Eduardo Aspiazu (1993)*
- *Carlos Catalan (1997)*
- *Medardo Varela (1998)*
- *Erwin Haroldo Ochoa López (2000)*
- *Julio Armando Vásquez Ramírez (2000)*
- *Digna Ochoa (2001)*
- *Dorothy Stang (2005)*
- *José (“Zé Claudio”) Ribeiro da Silva (2011)*
- *Maria do Espírito Santo (2011)*
- *Edwin Chota Valero (2014)*
- *Leoncio Quintisima Melendez (2014)*
- *Francisco Pinedo Ramirez (2014)*

- *Jorge Ríos Pérez (2014)*
- *Berta Cáceres Flores (2016)*
- *Nelson Noé Garcia (2016)*
- *Luiz Alberto Araújo (2016)*
- *Bill Kayong (2016)*
- *Sikhosiphi Rhadebe (2016)*

Sadly, there are hundreds of others who have lost their lives fighting to conserve forests and secure human rights and I mean no disrespect if their names are not included above.

Series Foreword: Environmental Policy and Regulation

Environmental Policy is a sector focused on the commitment to developing laws and regulations regarding the environment, including air, water, land, waste, natural resources, ecosystems and biodiversity. Environmental policy can be focused on a single ‘resource’ or many, and can be organisational, local, regional, national or international.

The seminal report ‘Our Common Future’, also known as the Brundtland Report, from the United Nations World Commission on Environment and Development (WCED) was published in 1987 and noted:

‘The world must quickly design strategies that will allow nations to move from their present, often destructive, processes of growth and development onto sustainable development paths. This will require policy changes in all countries, with respect both to their own development and to their impacts on other nations’ development possibilities.’

The global environmental policy sector is growing rapidly, as is the scale of the issues that face the environment itself. The global population is estimated by the UN to approach 10 billion by 2050. New patterns of consumption threaten natural resources, food and energy security, and cause pollution and climate change.

Policy makers are responding to this challenge in terms of supporting green technology and innovation, as well as developing diverse regulatory and policy measures which move society in a more 'sustainable' direction. More recently, there have been moves to integrate environmental policy into general policy areas rather than having separate environmental policy. This approach is called Environmental Policy Integration (EPI).

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London, UK

Justin Taberham

Foreword by Jan McAlpine

Brian McFarland has written a precise and, at the same time, sweeping overview of the state of play for financing tropical forest conservation. For anyone wanting to understand the landscape within which forests and finance reside, this book is a must read. It provides an historical overview of financing tropical forest conservation and its players from the eighteenth century forward. It also outlines a summary of the reason why tropical forests are essential and identifies what threatens them. It goes so far as describing the ecology of tropical forests, something often missed in a discussion of forest conservation finance. While by no means exhaustive, it provides a succinct view, through the lens of conservation, to understand what went before, what is happening now, and what could take place in the future for financing for tropical forest conservation.

What is unique in this book is the approach McFarland takes in describing topics such as the history of forest management, the development of understanding the ecology of forests, and the financing of forests, *inter alia*. He starts with a very broad overview of each topic—for example, on financing, he provides a broad description of finance globally, irrespective of forests, covering such topics as currencies, capital markets, equities and bonds, and short-term and long-term debt, *inter alia*. From there, the book narrows to a description of categories of conservation finance and the frameworks within which these reside.

It is notable that McFarland emphatically points to a large number of specific causes of deforestation and forest degradation, as he says, "...for every investment in the conservation of tropical rainforests, there needs to be a root cause analysis to make sure funds are specifically targeting the underlying drivers and agents of tropical rainforest deforestation and degradation." This is considered by foresters to be a critical element in achieving sustainability of forests and has most often been ignored in the past. Changes are under way along the lines McFarland points to, for example, in the IUCN-led Global Partnership on Forest Landscape Restoration.

Unlike some other literature on the subject, which ignores this aspect, McFarland clearly believes that we must learn from the past to craft the future. To this end, he provides a wide range of case studies which describe how financing occurred in each, how effective it was, and what are the lessons learned.

McFarland points out that tropical forest conservation has been financed not only by domestic but also international sources of financing. These came over the past several hundred years from only a few sources, notably Official Development Assistance (ODA) and domestic profits from logging or deforestation (albeit little financial capture at the local level). This is a pivotal point, because for the last decade we have seen the traditional sources of financing drying up and the need to craft, facilitate, and catalyze the new and innovative financing that this book points to as possible next steps.

One must note that many of the examples given are from the United States; however, the case studies' focus is on tropical forests. As the United States has a solid history of sustainable management of forests with innovative conservation finance mechanisms, it provides an excellent basis for what has worked in the Western Hemisphere and could work elsewhere.

Commodities which have the most severe impact on deforestation and forest degradation have also been given coverage here—also a point often ignored. These include cattle (including beef), soy, palm oil, pulp and paper, and timber. In the past, logging for timber production has been the sole focus, but these chapters illustrate the more compelling role of other commodities in deforestation and forest degradation.

There is no way for this foreword to do justice to this outstanding book. It is a rich exposé of the forests and the landscape within which they reside, as well as their needs—political, policy, finance, and notably, their importance for people, not the least of which are Indigenous Peoples.

I am simply hoping that this foreword titillates enough to get you started and I will not preempt the fascinating conclusions and recommendations provided by Brian McFarland—you must read them for yourself.

—Jan L. McAlpine*

* Jan McAlpine is the former Director of the United Nations Forum on Forests. Ms. McAlpine is highly respected, internationally recognized forest policy expert, who has served from her governmental and intergovernmental leadership positions. She is perhaps best known for her work on illegal logging, having conceived of the Forest Law Enforcement and Governance (FLEG or FLEG-T) process, first in Bali, Indonesia, where the first historic declaration was signed by both producing and consuming countries of illegally harvested timber. Ms. McAlpine is also recognized for her role in designing, developing, and negotiating the Congo Basin Forest Partnership (CBFP), launched in Johannesburg, South Africa, among other noteworthy accomplishments, among them finance and forests.

Preface

The inspiration for this book comes from a lifetime of observing first-hand some of the world's most spectacular landscapes and wildlife, and then hoping my son will be able to see the same landscapes and wildlife when he is older. There are few things in life that I appreciate more than seeing wildlife in their natural landscapes. Over the years, I have snorkeled with whale sharks (*Rhincodon typus*) the size of a school bus, swam near Amazon river dolphins (*Inia geoffrensis*), come upon fresh jaguar (*Panthera onca*) tracks, watched colorful scarlet macaws (*Ara macao*) fly overhead, and stood face to face with a wild black rhinoceros (*Diceros bicornis*).

While growing up in the small town of Amherst, New Hampshire, my life was complimented by a close family, wildlife, and a well-financed public school system. I can recall memories of my dad feeding hummingbirds out of his hand, my mom tending our vegetable garden, watching a moose (*Alces alces*) drink from our pond outside my bedroom, and fishing for largemouth bass (*Micropterus salmoides*) with my brother. Up until senior year of high school, I recall being most intrigued by science classes and conservation biology.

In parallel, toxic contamination sites in the neighboring town of Milford, New Hampshire, which may have resulted in localized illnesses such as brain cancer, stirred a desire in me to take up environmental studies and



Fig. 1 Brigitta and Brian snorkeling with whale shark (Credit: Brian Joseph McFarland)

work for a cause.¹ I considered becoming a lawyer or a medical doctor, but then I attended an experiential environmental learning program. It was during the summer after my junior year at Souhegan High School that I traveled to the Yucatan Peninsula in Mexico with our teacher Dan Bisaccio, now the Director of Science Education at Brown University, for real-world fieldwork in conjunction with the Smithsonian Institution's Monitoring & Assessment of Biodiversity (SIMAB) Program.² Although it took years working in a restaurant to earn the money to fund the trip, I became forever impassioned with conservation biology and our interconnected globe. For the first time, I saw poverty, I walked in a tropical rainforest, I snorkeled over a coral reef, and I watched Yucatan spider monkeys (*Ateles geoffroyi yucatanensis*) in the canopy. I started to understand the connections between poverty, slash-and-burn agriculture, commercial agriculture—particularly the global cattle trade—and tropical deforestation, tropical degradation, catastrophic climate change, and its impact on coral reefs.

Since then, I decided to travel back to Mexico and shortly thereafter to Costa Rica, Tanzania, and Kenya. During these additional education

programs, I gained further insights into the interconnectivity between natural resource management, ecotourism, and sustainable economic development. Next, I chose to study under Dr. Joseph Domask at American University. During this time, I interned at the US Environmental Protection Agency's Office of Enforcement and Compliance Assurance. In addition, I attended networking events at the Brazilian Embassy, the Inter-American Development Bank, the World Wildlife Fund, Greenpeace, and the World Bank and spent a month in Brazil studying tropical ecology and income inequality. I later enrolled in a Global Environmental Policy Master's program at American University's School of International Service and in a Master's in Business Administration program at American University's Kogod School of Business with a specialization in finance in emerging markets.

I started as an intern at Carbonfund.org Foundation when I began my graduate studies, and I still work today at Carbonfund.org Foundation and its wholly owned subsidiary CarbonCo. These two climate change organizations are supporting renewable energy and energy efficiency projects, along with the development and implementation of innovative forest conservation projects in the State of Acre, Brazil.

This book reflects my background. With travels to more than 22 countries, nearly 10 years of field experience, more than 60 semi-structured, in-depth interviews, and dozens of background readings, the book focuses on some of the financial instruments that can fund the conservation of the world's last remaining tropical rainforests. The world's tropical rainforests, from the Amazon Rainforest to the Congo Basin to the rainforests of Southeast Asia, are under grave threat of deforestation and degradation. These deforestation and degradation threats include, but are not limited to: cattle ranching, commercial and slash-and-burn subsistence agriculture, unsustainable logging, forest fires, and fuelwood collection, along with megaprojects for infrastructure development such as dams, mining, oil and gas exploration, and road construction.

Tropical deforestation and forest degradation are serious global environmental issues. Conserving tropical rainforests helps mitigate global climate change by stopping deforestation and forest degradation that annually release more than three billion tonnes of carbon dioxide equivalent emissions. Conservation can improve the livelihoods of billions of

locally forest-dependent people and Indigenous Peoples. Protecting tropical rainforests also maintains the global hydrological cycle. Finally, conservation can provide refuge for the world's highest levels of terrestrial biodiversity. However, conserving these tropical rainforests is contingent upon raising both sufficient and long-term international financing that is structured to support scalable, landscape-level initiatives.

This book follows a chronological order. It briefly examines the historical development of conservation finance for tropical rainforests. Conservation finance originally developed from governments in the form of domestic budgeting from taxation for the creation and maintenance of state or national parks alongside philanthropy, followed by utilizing tax deductions created for enrolling lands in conservation easements, and then by international aid to assist foreign countries with their own state or national parks. Conservation finance then evolved to include impact investing, payments for ecosystem services, debt-for-nature swaps, ecotourism, and bioprospecting. Today, conservation finance includes these approaches while it also is expanding into certified sustainable products, corporate commitments to zero deforestation supply chains, and the issuance of green bonds.

The book, in order to help an interdisciplinary audience, will begin with a context of tropical rainforest deforestation and degradation, followed by a review of tropical rainforest ecology, global environmental policy, and international finance.

Each chapter will then be dedicated to a unique conservation financing instrument. Each of these chapters will follow a similar format, starting with a brief historical overview of the instrument, followed by an explanation of how the instrument works, then by providing background information on the size of the instrument, and concluding with a presentation of case studies, a financial analysis, a policy analysis, and a future outlook for the instrument.

All 24 case studies, which span 15 countries and 4 continents, are based off the following format:

1. The Problem

- a. Identify the Problem.
- b. Explain Why the Problem Is Important.

- c. How Was the Problem Identified?
 - d. Was the Process for Identifying the Problem Effective?
2. Steps Taken to Address the Problem
 3. Results
 4. Challenges and How They Were Met
 5. Beyond Results
 6. Lessons Learned³

The financial analysis will examine the return versus risks of the financial instruments. The risk categories will include:

- Business Risk;
- Strategic Risk;
- Reputation Risk;
- Liquidity Risk;
- Operational Risk;
- Legal and Regulatory Risk;
- Credit Risk; and
- Market Risk.

The policy analysis will utilize the following format:

1. Defining the Problem.
2. Establishing Goals.
3. Selecting a Policy.
4. Implementing a Policy.
5. Evaluating the Policy.⁴

I want to highlight, upfront, the following:

First, this book focuses on the conservation of tropical rainforests. While all biomes are important—from temperate rainforests to coral reefs to the Arctic tundra—tropical rainforests are the focus of this book given its unique issues.

Second, protected areas or conservation projects are often financed via complex mechanisms such as a combination of trust fund financing,

domestic budgetary allocations, and revenue from ecotourism. This said, if a case study is categorized under domestic budgetary allocations, that is not to say that the protected area received exclusive financing from domestic budgetary allocations.

Third, US-based and European Union-based conservation is different than tropical rainforest conservation. For example, Indigenous Peoples and forest-dependent communities are often present within tropical rainforest conservation areas and their buffer zones. In addition, there tends to be greater income inequality and less overall wealth in the host countries of tropical rainforests. For example, the GINI coefficient—which is a leading economic indicator of wealth inequality among households—was 25.90 (in 2012) for Norway, 26.94 (in 2012) for Iceland, and 30.13 (in 2011) for Germany, while Brazil was 52.87 (in 2013), Indonesia was 35.57 (in 2010), and the Democratic Republic of the Congo was 42.10 (in 2012).⁵ Competing for government budgets are other pressing domestic issues such as poverty, energy access, education, and healthcare. Furthermore, corruption tends to be higher in such areas⁶ and the ease of doing business is often much more difficult.⁷

Fourth, the requirements for effective tropical rainforest conservation include the rule of law, transparency, social justice, and long-term financing requirements.

Fifth, there are sources of financing, there are conservation outcomes, and there are financing instruments that bridge the gap between the sources of financing and these conservation outcomes. These three groups can often be confused. To clarify, sources of financing can come from individuals, foundations (corporate and family), businesses (small and medium enterprises and publicly traded corporations), and governments (domestic spending and through bilateral or multilateral channels). Conservation outcomes include: state or national parks, international peace parks, private reserves, conservation concessions, conservation easements, and sustainable forestry and agriculture operations. The financing instruments that bridge the gap between the sources of financing and the conservation outcomes—which will be the focus of this book—include: debt-for-nature swaps, payments for ecosystem services, premiums for green procurements, taxation, and tax deductions. This book explores all three groups, with an emphasis on the historical evolution of financing instruments.

Sixth, unfortunately, developing long-term financing to conserve tropical rainforests may not protect such forests unless climate change is also mitigated.

Seventh, for every investment in the conservation of tropical rainforests, there needs to be a root cause analysis to make sure funds are specifically targeting the underlying drivers and agents of tropical rainforest deforestation and degradation.

Eighth, while tropical rainforests are beautiful, they are incredibly tough environments to work and live in. From poisonous snakes to mosquito-borne illnesses to the hot, humid weather, tropical rainforest work is—to say the least—challenging and yet rewarding and absolutely necessary because of the need to mitigate global climate change, to halt the catastrophic collapse of biodiversity, and to improve the livelihoods of forest-dependent peoples.

Ninth, while I truly believe that tropical rainforests have intrinsic value—due to their tremendous biodiversity and the resources they provide for billions of livelihoods—if there is no extrinsic value placed on these forests, then decision-makers, whether it be political or business, will be more apt to undertake activities and policies that will lead to the conversion of these forests to other land uses.

April 2017

Brian Joseph McFarland

Comprehensive Timeline

This is a fairly comprehensive timeline outlining when conservation organizations and associations were established, along with when famous conservationists were born. The author apologizes if not everyone and every organization is listed as this is intended to be more of an illustration. However, there is a more detailed timeline in each of the chapters.

Conservation Organizations Around the World

Nineteenth Century

- 1826: The Zoological Society of London (ZSL) is founded by Sir Thomas Stamford Raffles.⁸
- 1846: Smithsonian Institution is founded.⁹
- 1865: Massachusetts State Fish & Wildlife Agency—the first such agency in the United States—originates.¹⁰
- 1873: Massachusetts Fish & Game Association (MFGA), oldest incorporated conservation organization in the United States, is founded.¹¹
- 1875: Led by John Aston Warder, the American Forestry Association (now known as American Forests) is founded.¹²
- 1888: The National Geographic Society is founded.¹³

- 1889: Royal Society for the Protection of Birds (RSPB) is founded.¹⁴
- 1891: The Trustees of Public Reservations (now the Trustees of Reservations, or TTOR), the world's first regional land trust, is established.¹⁵
- 1892: The Sierra Club is founded by John Muir.¹⁶
- 1895: Wildlife Conservation Society (WCS, originally known as the New York Zoological Society) is founded by Henry Fairfield Osborn and Andrew Haswell Green.¹⁷
- 1896: Massachusetts Audubon Society, the world's oldest existing Audubon Society, is created in Boston by Harriet Hemenway and Mina Hall.¹⁸

Twentieth Century

- 1903: The Society for the Preservation of the Wild Fauna of the Empire (now known as Fauna and Flora International or FFI) is founded.¹⁹
- 1905: The National Audubon Society is founded.²⁰
- 1919: National Parks Conservation Association is established.²¹
- 1922: The International Council for Bird Preservation (ICBP) is founded; ICBP would rebrand as BirdLife International in 1993.²²
- 1926: Charles Stewart Mott Foundation is founded.²³
- 1935: The Wilderness Society is founded by Aldo Leopold, Bob Marshall, Robert Sterling Yard, and others.²⁴
- 1936: The General Wildlife Federation (now known as the National Wildlife Federation or NWF) is founded by Jay Norwood Darling.²⁵
- 1936: Ford Foundation is established.²⁶
- 1937: Ducks Unlimited is incorporated.²⁷
- 1942: Inter-American Institute for Agricultural Science (IICA) is founded. The IICA would later spin out the Centro Agronomico Tropical de Investigacion y Enseñanza (CATIE; The Tropical Agricultural Research and Higher Education Center) in 1973.²⁸
- 1945: Cooperative for Assistance and Relief Everywhere (CARE) is founded.²⁹
- 1946: "Barro Colorado Island became part of the Smithsonian Institution in 1946. In 1966, the organization changed its name to the Smithsonian Tropical Research Institute (STRI)."³⁰

- 1946: The Ecologists Union, which would later change its name to The Nature Conservancy (TNC) in 1950, is formed.³¹
- 1947: Defenders of Wildlife (formerly known as Defenders of Fur Bearers) is founded.³²
- 1948: International Union for the Conservation of Nature (IUCN) is founded.³³
- 1951: The Nature Conservancy (TNC) is incorporated.³⁴
- 1952: Resources for the Future (RFF) is founded.³⁵
- 1961: World Wildlife Fund (WWF) is founded by Julian Huxley, Edward Max Nicholson, Peter Scott, and Guy Mountfort.³⁶ WWF is known as World Wildlife Fund in the United States and Canada, but is known elsewhere as the World Wide Fund for Nature.
- 1961: The African Wildlife Foundation (AWF, formerly known as the African Wildlife Leadership Foundation) is founded.³⁷
- 1963: Weeden Foundation is established.³⁸
- 1963: Organization for Tropical Studies (OTS) is founded.³⁹
- 1964: David and Lucile Packard Foundation is established.⁴⁰
- 1965: National Recreation and Park Association (NRPA) is formed.⁴¹
- 1967: Environmental Defense Fund (EDF) is founded by Art Cooley, Charlie Wurster, and Dennis Puleston.⁴²
- 1970: Natural Resources Defense Council (NRDC) is founded.⁴³
- 1970: MacArthur Foundation is founded.⁴⁴
- 1971: Greenpeace is founded.⁴⁵
- 1971: The Consultative Group on International Agricultural Research (CGIAR) is formed.⁴⁶
- 1971: Pact International is founded.⁴⁷
- 1971: Orangutan Research and Conservation Project (ORCP) “was the initial name of the program started in 1971 by Dr. Biruté Mary Galdikas and her former husband, Rod Brindamour.” ORCP would later lead to the establishment of the Orangutan Foundation International (OFI) in 1986.⁴⁸
- 1972: Trust for Public Land (TPL) is founded.⁴⁹
- 1973: The Centro Agronomico Tropical de Investigacion y Enseñanza (CATIE; The Tropical Agricultural Research and Higher Education Center) is spun out of the Inter-American Institute for Agricultural Science (IICA).⁵⁰

- 1974: The Worldwatch Institute is founded by Lester Brown.⁵¹
- 1974: Open Space Institute is founded.⁵²
- 1976: TRAFFIC is established.⁵³
- 1977: Jane Goodall Institute for Wildlife Research, Education and Conservation (JGI) is founded by Jane Goodall and Princess Genevieve di San Faustino.⁵⁴
- 1977: The Green Belt Movement (GBM) is founded by Professor Wangari Maathai.⁵⁵
- 1978: The World Agroforestry Centre (i.e., formerly known as The International Council for Research in Agroforestry or ICRAF) is founded.⁵⁶
- 1980: The School for Field Studies (SFS) is founded.⁵⁷
- 1981: Pronatura is founded.⁵⁸
- 1982: World Resources Institute (WRI) is founded by James Gustave Speth.⁵⁹
- 1982: Land Trust Alliance is founded.⁶⁰
- 1983: The Fundación Defensores de la Naturaleza (FDN; Nature Defenders Foundation) is founded.⁶¹
- 1984: National Fish and Wildlife Foundation is founded.⁶²
- 1984: SCS is founded. In 1988, SCS would become Scientific Certification Systems, Inc. (SCS) and now is SCS Global Services.⁶³
- 1985: Rainforest Action Network (RAN) is founded by Randy Hayes and Mike Roselle.⁶⁴
- 1985: Woods Hole Research Center (WHRC) is founded by George Woodwell.⁶⁵
- 1985: Winrock International is created by Rockefeller Family by merging Winrock International Research and Training Center, the International Agricultural Development Service, and the Agricultural Development Council.⁶⁶
- 1985: The Conservation Fund is founded.⁶⁷
- 1986: Amigos de Sian Ka'an (Friends of Sian Ka'an) is founded.⁶⁸
- 1986: Environmental Services, Inc. (ESI) is founded.⁶⁹
- 1987: Conservation International (CI) is founded by Spencer Beebe and Peter A. Seligmann.⁷⁰
- 1987: Rainforest Alliance is cofounded by Daniel Katz.⁷¹
- 1988: SOS Amazônia is founded.⁷²

- 1988: Rainforest Conservation Fund is founded.⁷³
- 1988: Rainforest Trust is founded.⁷⁴
- 1988: Wildlife Habitat Council (WHC) is founded.⁷⁵
- 1988: SaveNature.org is founded.⁷⁶
- 1989: Stockholm Environmental Institute (SEI) is founded.⁷⁷
- 1989: CERES (Coalition for Environmentally Responsible Economies) is founded by Joan Bavaria.⁷⁸
- 1989: The Rainforest Foundation founded by “Sting and his wife Trudie Styler in 1989 focuses primarily on the protection of Indigenous Peoples rights.”⁷⁹ In 1996, Rainforest Foundation Norway would become an independent foundation.⁸⁰
- 1990: Imazon is founded.⁸¹
- 1990: International Institute for Sustainable Development (IISD) is founded.⁸²
- 1990: The Turner Foundation is established.⁸³
- 1991: Project Piaba is started.⁸⁴
- 1992: EcoLogic Development Fund is founded by Russell Byers, Jr. and Shaun Paul.⁸⁵
- 1993: Center for International Forestry Research (CIFOR) is founded.⁸⁶
- 1994: Leuser International Foundation (LIF) is established.⁸⁷
- 1994: Yayasan Keanekaragaman Hayati Indonesia (KEHATI; The Indonesian Biodiversity Foundation) is established.⁸⁸
- 1995: The World Industry Council for the Environment (WICE) and Business Council for Sustainable Development (BCSD) merge to form the World Business Council for Sustainable Development (WBCSD). In 1990, Stephan Schmidheiny created the first Business Council for Sustainable Development (BCSD).⁸⁹
- 1995: Instituto de Pesquisa Ambiental da Amazônia (IPAM; Amazon Environmental Research Institute in English) is founded.⁹⁰
- 1995: Instituto de Manejo e Certificação Florestal e Agrícola (IMAFLORA) is founded.⁹¹
- 1995: Wildlife Alliance is founded.⁹²
- 1995: The Mexican Civil Council for Sustainable Forestry is formalized.⁹³
- 1996: Nature and Culture International is founded.⁹⁴

- 1996: Fundo Brasileiro para a Biodiversidade (FUNBIO, The Brazilian Biodiversity Fund) started operations.⁹⁵
- 1996: Amazon Watch is founded.⁹⁶
- 1996: Doris Duke Charitable Foundation is established.⁹⁷
- 1997: Wildlife Works is founded by Mike Korchinsky; Wildlife Works Carbon LLC would later be founded in 2008.⁹⁸
- 1997: Future Forests is founded. Future Forests would later rebrand as The CarbonNeutral Company and then rebrand again in 2015 as Natural Capital Partners.⁹⁹
- 1997: Emerald Planet is founded by Michael Robison.¹⁰⁰
- 1997: Bonobo & Congo Biodiversity Initiative (BCBI) is created by the Zoological Society of Milwaukee (ZSM).¹⁰¹
- 1997: Sumatran Orangutan Society (SOS) is established.¹⁰²
- 1998: Forest Trends is founded.¹⁰³
- 1998: Conservation Strategy Fund (CSF) is founded by John Reid.¹⁰⁴
- 1998: Global Nature Fund is founded.¹⁰⁵
- 1999: Root Capital is founded.¹⁰⁶
- 1999: Amazon Conservation Association (ACA) is founded.¹⁰⁷
- 1999: CO₂OL-USA is founded by Keegan Eisenstadt (CO₂OL-USA would later assimilate into ClearSky Climate Solutions in 2008).¹⁰⁸
- 1999: The International Small Group & Tree Planting Program (TIST) is founded.¹⁰⁹
- 1999: The Programme for the Endorsement of Forest Certification (PEFC) is founded.¹¹⁰
- 1999: Mongabay is founded by Rhett A. Butler.¹¹¹

Twenty-First Century

- 2000: Carbosur is founded.¹¹²
- 2000: Trucost is established.¹¹³
- 2000: Gordon and Betty Moore Foundation is founded.¹¹⁴
- 2000: Sumatran Rainforest Institute (SRI) is established.¹¹⁵
- 2000: Kemitraan partnership is established.¹¹⁶

- 2001: Yayasan Orangutan Sumatera Lestari—Orangutan Information Centre (YOSL—OIC) is founded by Panut Hadisiswoyo with assistance from the Sumatran Orangutan Society (SOS).¹¹⁷
- 2001: Global Canopy Programme is founded by Andrew Mitchell.¹¹⁸
- 2001: The Center for Global Development (CGD) is founded by Edward Scott Jr., C. Fred Bergsten, and Nancy Birdsall.¹¹⁹
- 2001: BlueOrchard is founded.¹²⁰
- 2003: Carbonfund.org Foundation is established by Eric and Lesley Carlson.
- 2004: Bosques Amazonicos (BAM) is established.¹²¹
- 2004: Climate Focus is founded.¹²²
- 2004: Instituto de Conservação e Desenvolvimento Sustentável do Amazonas (IDESAM, Institute for Conservation and Sustainable Development of Amazonas in English) is established.¹²³
- 2005: New Forests is founded.¹²⁴
- 2005: ERA Carbon Offsets is founded. In 2012, Offsetters Climate Solutions (OCS) was formed through the consolidation of ERA Ecosystem Restoration Associates Inc., Carbon Credit Corp. (CCC), and Offsetters Clean Technology.¹²⁵ In 2015, “NatureBank includes the combination of Era Ecosystem Services and Forest Finest Consulting Inc. under the NatureBank banner, while the voluntary carbon brands of Offsetters and CO₂OL will continue to operate as subsidiaries under NatureBank.”¹²⁶
- 2005: Paso Pacifico is founded.¹²⁷
- 2006: Ecosystem Services LLC is founded.¹²⁸
- 2006: Panthera is founded by Daphne Recanati Kaplan and Dr. Thomas S. Kaplan.¹²⁹
- 2006: South Pole Carbon is created.¹³⁰
- 2006: TerraCarbon is formed by Scott Settelmyer and Dr. Bernhard Schlamadinger.¹³¹
- 2006: Terra Global Capital is founded by Leslie Durschinger.¹³²
- 2006: EnviroMarket Ltd. is founded.¹³³
- 2007: Anthroctect is founded.¹³⁴
- 2007: PT. Rimba Makmur Utama (PT. RMU) is founded.¹³⁵
- 2007: Forest Carbon Group is founded.¹³⁶
- 2007: Fundação Amazonas Sustentável (FAS, The Sustainable Amazonas Foundation) is founded.¹³⁷

- 2007: EKO Asset Management Partners, LLC is founded. EKO would later merge with Wolfensohn Fund Management, L.P. in 2014 to form Encourage Capital.¹³⁸
- 2007: International Conservation Fund of Canada (ICFC) is founded.¹³⁹
- 2008: Climate Advisers is founded.¹⁴⁰
- 2008: C-Quest Capital (CQC) is founded.¹⁴¹
- 2008: Carbon Decisions International is founded.¹⁴²
- 2008: InfiniteEARTH is founded.¹⁴³
- 2008: ClimateWorks Foundation is established.¹⁴⁴
- 2009: BioCarbon Group is founded (initial capital raised in 2011).¹⁴⁵
- 2009: The Carbon War Room is founded.¹⁴⁶
- 2009: Forest Carbon Offsets LLC is established.¹⁴⁷
- 2009: Climate Bonds Initiative is established.¹⁴⁸
- 2010: Permian Global Advisors LLP is incorporated.¹⁴⁹
- 2010: Clarmondial is established.¹⁵⁰
- 2011: Althelia Ecosphere is launched.¹⁵¹
- 2011: Bolsa de Valores Ambientais Rio de Janeiro (BVRio, Rio de Janeiro Environmental Exchange) and the BVRio Institute are established.¹⁵²
- 2013: Earth Innovation Institute (EII) is founded (created out of IPAM's International Program).¹⁵³
- 2015: Institut Penelitian Inovasi Bumi (INOBU, Earth Innovation's Research Institute) was registered as an Indonesian, nonprofit research institute in 2015. INOBU grew out of Earth Innovation Institute's (EII) Indonesia program.¹⁵⁴
- 2017: Everland is founded by Wildlife Works.¹⁵⁵

Associations/Networks

- 1951: Association Technique Internationale des Bois Tropicaux (ATIBT, International Tropical Timber Technical Association) is created.¹⁵⁶
- 1965: Associação Nacional dos Exportadores de Cereais (ANEC, National Association of Cereal Exporters) has begun.¹⁵⁷
- 1975: National Wildlife Refuge Association is founded.¹⁵⁸
- 1981: Associação Brasileira das Indústrias de Óleos Vegetais (ABIOVE, Brazilian Association of Vegetable Oil Industries) is founded.¹⁵⁹

- 1984: La Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (COICA, Coordinator of Indigenous Organizations of the Amazon River Basin) is founded.¹⁶⁰
- 1985: Society for Conservation Biology (SCB) is founded.¹⁶¹
- 1995: Alliance of Religions and Conservation (ARC) is founded by Prince Philip.¹⁶²
- 1995: International Land Coalition (ILC) is founded.¹⁶³
- 1996: Tebtebba (Indigenous Peoples' International Centre for Policy Research and Education) is established.¹⁶⁴
- 1997: Environmental Markets Association (EMA) is established.¹⁶⁵
- 1998: National Mitigation Banking Association (NMBA) is established.¹⁶⁶
- 1999: The International Emissions Trading Association (IETA) is founded.¹⁶⁷
- 1999: Latin American and Caribbean Network of Environmental Funds (RedLAC) is established.¹⁶⁸
- 2000: Carbon Disclosure Project (now known as CDP) is founded.¹⁶⁹
- 2002: Conservation Finance Alliance is established.¹⁷⁰
- 2002: Wildlife Conservation Network (WCN) is established.¹⁷¹
- 2003: Global Footprint Network is established.¹⁷²
- 2004: Roundtable on Sustainable Palm Oil (RSPO) is established.¹⁷³
- 2005: Leather Working Group (LWG) is formed.¹⁷⁴
- 2006: Round Table on Responsible Soy (RTRS) is established.¹⁷⁵
- 2006: Conservation Finance Alliance grows out of “a pilot workshop envisioned at Lincoln Institute of Land Policy in 2006 and held at Yale School of Forestry & Environmental Studies in 2007.”¹⁷⁶
- 2007: Grupo de Trabalho da Pecuária Sustentável (GTFS, Brazilian Roundtable for Sustainable Livestock) is created.¹⁷⁷
- 2008: International Carbon Reduction & Offset Alliance (ICROA) is founded.¹⁷⁸
- 2008: The Finance Alliance for Sustainable Trade (FAST) is launched.¹⁷⁹
- 2008: The Carbon Markets and Investors Association (CMIA) is formed “by the merger of The Carbon Markets Association (CMA) and International Carbon Investors and Services (INCIS).”¹⁸⁰ The Carbon Markets and Investors Association rebranded in October 2011 as the Climate Markets and Investment Association.¹⁸¹

- 2009: Global Impact Investing Network (GIIN) is launched.¹⁸²
- 2009: Consumer Goods Forum is formed.¹⁸³
- 2010: The Global Roundtable for Sustainable Beef is formed.¹⁸⁴
- 2010: Climate and Land Use Alliance is established.¹⁸⁵
- 2011: REDD Offset Working (ROW) Group is established.¹⁸⁶
- 2011: The Practitioners' Network for Large Landscape Conservation is founded. The Network is now known as the Network for Landscape Conservation.¹⁸⁷
- 2012: Tropical Forest Alliance 2020 is launched.¹⁸⁸
- 2012: Code REDD is established.¹⁸⁹
- 2014: First organizational meeting of the International Land Conservation Network is held.¹⁹⁰
- 2016: The Conservation Finance Practitioner Roundtable is launched.¹⁹¹
- 2016: Coalition for Private Investment in Conservation (CPIC) is launched.¹⁹²
- 2017: The Interfaith Rainforest Initiative is launched.¹⁹³

Famous Conservationists Throughout History

Eighteenth Century

- February 13/14, 1766, to December 29, 1834: Thomas Robert Malthus.¹⁹⁴
- September 14, 1769, to May 6, 1859: Alexander von Humboldt.¹⁹⁵
- August 29, 1773, to May 11, 1858: Aimé Jacques Alexandre Bonpland.¹⁹⁶

Nineteenth Century

- February 12, 1809, to April 19, 1882: Charles Robert Darwin.¹⁹⁷
- July 12, 1817, to May 6, 1862: Henry David Thoreau.¹⁹⁸
- January 8, 1823, to November 7, 1913: Alfred Russel Wallace.¹⁹⁹
- February 8, 1825, to February 16, 1892: Henry Walter Bates.²⁰⁰
- April 3, 1837, to March 29, 1921: John Burroughs.²⁰¹
- April 21, 1838, to December 24, 1914: John Muir.²⁰²
- September 20, 1849, to April 11, 1938: George Bird Grinnell.²⁰³

- December 1, 1854, to March 6, 1937: William T. Hornaday.²⁰⁴
- May 12, 1856, to September 9, 1901: Andreas Franz Wilhelm (A.F.W.) Schimper.²⁰⁵
- August 8, 1857, to November 6, 1935: Henry Fairfield Osborn.²⁰⁶
- October 27, 1858, to January 6, 1919: US President Theodore Roosevelt.²⁰⁷
- February 1, 1861, to May 17, 1945: Robert Sterling Yard.²⁰⁸
- May 5, 1865, to January 19, 1958: Cândido Rondon.²⁰⁹
- August 11, 1865, to October 4, 1946: Gifford Pinchot.²¹⁰
- July 4, 1867, to January 22, 1930: Stephen Mather.²¹¹
- November 3, 1877, to November 20, 1962: Rosalie Edge.²¹²
- March 6, 1879, to December 11, 1975: Emile Benton MacKaye.²¹³
- February 6, 1884, to June 6, 1977: Ernest Oberholtzer.²¹⁴
- January 11, 1887, to April 21, 1948: Aldo Leopold.²¹⁵
- March 1, 1889, to October 21, 1963: Olaus Murie.²¹⁶
- December 27, 1896, to March 18, 1956: Louis Bromfield.²¹⁷
- April 4, 1899, to January 13, 1982: Sigurd Ferdinand Olson.²¹⁸

Twentieth Century

- January 2, 1901, to November 11, 1939: Bob Marshall.²¹⁹
- February 20, 1902, to April 22, 1984: Ansel Adams.²²⁰
- March 7, 1902, to November 15, 1964: Bernard Frank.²²¹
- July 15, 1902, to March 8, 1968: Harvey Broome.²²²
- August 18, 1902, to October 19, 2003: Margaret (Mardy) Murie.²²³
- August 7, 1903, to October 1, 1972: Louis Seymour Bazett Leakey.²²⁴
- July 5, 1904, to February 3, 2005: Ernst Walter Mayr.²²⁵
- March 28, 1905, to June 14, 1986: Marlin Perkins.²²⁶
- February 3, 1906, to August 20, 1989: George Alexander Graham Adamson.²²⁷
- February 25, 1906, to May 5, 1964: Howard Zahniser.²²⁸
- May 27, 1907, to April 14, 1964: Rachel Carson.²²⁹
- December 9, 1908, to October 4, 1995: Paul Westmacott (P.W.) Richards.²³⁰
- September 14, 1909, to August 29, 1989: Sir Peter Markham Scott.²³¹
- January 20, 1910, to January 3, 1980: Joy Adamson.²³²

- June 11, 1910, to June 25, 1997: Jacques-Yves Cousteau.²³³
- September 17, 1913, to August 10, 2002: Eugene Pleasants Odum.²³⁴
- January 12, 1915, to April 10, 2001: Dr. Richard Evans Schultes.²³⁵
- April 21, 1915, to September 14, 2003: Garrett James Hardin.²³⁶
- June 4, 1916, to July 3, 2005: Gaylord Anton Nelson.²³⁷
- January 19, 1917, to May 26, 2015: Leo A. Drey.²³⁸
- April 17, 1918, to November 16, 1981: William Holden.²³⁹
- January 13, 1919, to December 1, 2001: Celia Hunter.²⁴⁰
- May 27, 1919, to November 5, 2002: Raymond F. Dasmann.²⁴¹
- January 6, 1920, to April 19, 2004: John Maynard Smith.²⁴²
- May 12, 1921, to May 6, 2014: Farley McGill Mowat.²⁴³
- September 1, 1924, to September 11, 2002: Howard T. Odum.²⁴⁴
- January 7, 1925, to January 30, 1995: Gerald Malcolm Durrell.²⁴⁵
- May 12, 1926, to September 8, 2010: George Christopher Williams.²⁴⁶
- January 29, 1927, to March 14, 1989: Edward Abbey.²⁴⁷
- March 15, 1927, to November 30, 2014: Ian Cedric Player.²⁴⁸
- May 8, 1926, to Present: Sir David Attenborough.²⁴⁹
- June 10, 1929, to Present: Dr. Edward Osborne (E.O.) Wilson.²⁵⁰
- April 7, 1930, to November 1, 1972: Robert H. MacArthur.²⁵¹
- January 16, 1932, to December 26, 1985: Dian Fossey.²⁵²
- May 29, 1932, to Present: Paul Ralph Ehrlich.²⁵³
- July 10, 1932, to Present: Dr. Gordon Orians.²⁵⁴
- March 28, 1934, to Present: Lester R. Brown.²⁵⁵
- April 3, 1934, to Present: Dr. Jane Goodall.²⁵⁶
- August 24, 1934, to Present: Norman Myers.²⁵⁷
- October 21, 1934, to Present: Arturo Gómez-Pompa.²⁵⁸
- June 13, 1936, to Present: Peter H. Raven.²⁵⁹
- August 1, 1936, to March 7, 2000: William D. Hamilton.²⁶⁰
- September 10, 1937, to Present: Jared Diamond.²⁶¹
- March 5, 1938, to November 22, 2011: Lynn Margulis.²⁶²
- July 21, 1938, to Present: Herman Daly.²⁶³
- January 18, 1939, to Present: Dr. Daniel Hunt Janzen.²⁶⁴
- April 20, 1939, to Present: Gro Harlem Brundtland.²⁶⁵
- 1939 (circa) to September 7, 2006: Clem Coetzee.²⁶⁶
- April 1, 1940, to September 25, 2011: Wangari Muta Maathai.²⁶⁷
- June 28, 1940, to Present: Muhammad Yunus.²⁶⁸

- December 1, 1940, to Present: Terry L. Erwin.²⁶⁹
- 1940 (circa) to July 24, 2006: Abi Kusno Nachran.²⁷⁰
- March 29, 1941, to Present: Dr. James Hansen.²⁷¹
- July 7, 1941, to Present: Bill Oddie.²⁷²
- August 22, 1941, to Present: Dr. Thomas Lovejoy.²⁷³
- September 10, 1941, to May 20, 2002: Stephen Jay Gould.²⁷⁴
- March 4, 1942, to Present: James Gustave Speth.²⁷⁵
- February 19, 1943, to Present: Robert Ludlow (“Bob”) Trivers.²⁷⁶
- December 15, 1944, to December 22, 1988: Francisco Alves Mendes, Jr. (Chico Mendes).²⁷⁷
- December 19, 1944, to Present: Richard Leakey.²⁷⁸
- January 6, 1945, to August 3, 1993: Alwyn Howard Gentry.²⁷⁹
- May 10, 1946, to Present: Dr. Biruté Mary Galdikas.²⁸⁰
- January 2, 1947, to Present: Jack Bushnell Hanna.²⁸¹
- March 31, 1948, to Present: Albert (“Al”) Arnold Gore, Jr.²⁸²
- October 29, 1948, to Present: Dr. Franciscus Bernardus Maria “Frans” de Waal.²⁸³
- November 8, 1949, to Present: Russell Mittermeier.²⁸⁴
- December 2, 1950, to Present: Captain Paul Watson.²⁸⁵
- June 27, 1951, to Present: Dr. Adrian Forsyth.²⁸⁶
- February 14, 1953, to May 10, 2016: Ilkka A. Hanski.²⁸⁷
- April 1, 1953, to August 3, 1993: Theodore Albert “Ted” Parker III.²⁸⁸
- August 19, 1954, to Present: Daniel J. Bisaccio.²⁸⁹
- December 8, 1960, to Present: Bill McKibben.²⁹⁰
- February 22, 1962, to September 4, 2006: Steve Irwin.²⁹¹
- July 20, 1964, to Present: Terri Irwin.²⁹²
- July 11, 1967, to Present: Jeff Corwin.²⁹³

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The opinions expressed in this book are those of the author and do not necessarily represent the views of Carbonfund.org or CarbonCo.

Acronyms

AB	Assembly Bill
ABIOVE	Associação Brasileira das Indústrias de Óleos Vegetais (Brazilian Association of Vegetable Oil Industries)
ACA	Amazon Conservation Association
ACES	A Community of Ecosystem Services
ACG	Area de Conservación Guanacaste (of Costa Rica)
ACR	American Carbon Registry
ACT	Amazon Cooperation Treaty
ADB	Asian Development Bank
AfDB	African Development Bank
AFOLU	Agriculture, Forestry and Other Land Uses
AIM	Alternative Investment Market
AMTAVE	La Asociación Mexicana de Turismo de Aventura y Ecoturismo (Mexican Association of Adventure Tourism and Ecotourism)
ANEC	Associação Nacional dos Exportadores de Cereais (National Association of Cereal Exporters)
ANSI	American National Standards Institute
APEC	Asia-Pacific Economic Cooperation
APP	Asia Pulp and Paper Group
ARB	Air Resources Board (of California)
ARC	Alliance of Religions and Conservation
ARPA	Amazon Region Protected Areas

ASCAF	Agricultural Supply Chain Adaptation Facility
ATIBT	Association Technique Internationale des Bois Tropicaux (International Tropical Timber Technical Association)
AUM	Assets Under Management
AWF	African Wildlife Foundation
BAM	Bosques Amazonicos
BBOP	Business and Biodiversity Offsets Program
BCBI	Bonobo & Congo Biodiversity Initiative
BCI	Barro Colorado Island
BCN	Biodiversity Conservation Network (of USAID)
BCNM	Barro Colorado Nature Monument
BCSD	Business Council for Sustainable Development
BIOFIN	Biodiversity Finance Initiative (of UNDP)
BLM	Bureau of Land Management
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (of Brazil; National Bank of Economic and Social Development)
BNS	Basic Necessities Survey
BOLFOR	Bolivia Sustainable Forest Management Project
BTF	Bhutan Trust Fund for Environmental Conservation
BVRio	Bolsa de Valores Ambientais Rio de Janeiro (Rio de Janeiro Environmental Exchange)
C2D	Debt Development Contract
CA	California
CAFI	Central African Forest Initiative
CAFs	Certificados de Abonos Forestales (Forest Bond Certificates)
CAR	Cadastro Ambiental Rural (of Brazil; Rural Environmental Registry)
CAR	Central African Republic
CAR	Climate Action Reserve
CARE	Cooperative for Assistance and Relief Everywhere
CARPE	Central Africa Regional Program for the Environment
CATIE	Centro Agronomico Tropical de Investigacion y Enseñanza (The Tropical Agricultural Research and Higher Education Center)
CBD	Convention on Biological Diversity (of United Nations)
CCAR	California Climate Action Registry

CCBA/CCBS	Climate, Community and Biodiversity Alliance/ Climate, Community and Biodiversity Standard
CCC	Carbon Credit Corp.
CCIR	Certificado de Cadastro de Imóvel Rural (of Brazil; Certificate of Registration of Rural Property)
CCX	Chicago Climate Exchange
CDM	Clean Development Mechanism
CDP	Carbon Disclosure Project (now known as CDP)
CEF	Closed-End Fund or Closed-Ended Fund
CERES	Coalition for Environmentally Responsible Economies
CGD	Center for Global Development
CGIAR	Consultative Group on International Agricultural Research
CI	Conservation International
CICERO	Center for International Climate and Environmental Research
CIFOR	Center for International Forestry Research
CINRAM	Center for Integrated Natural Resources and Agricultural Management (of the University of Minnesota)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CLDP	Conservation and Limited Development Project
CLDs	Conservation Leadership Dialogues
CMA	Carbon Market Association
CMIA	Carbon Markets and Investors Association (now known as the Climate Markets and Investment Association)
CO ₂ e	Carbon Dioxide Equivalent (Emissions)
COICA	La Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (Coordinator of Indigenous Organizations of the Amazon River Basin)
COMIFAC	Commission des Forêts d'Afrique Centrale (Central African Forest Commission)
CONABIO	Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (Biodiversity National Council of Mexico)

CONANP	Comisión Nacional de Áreas Naturales Protegidas (National Commission of Protected Natural Areas)
CONAP	Consejo Nacional de Areas Protegidas (of Guatemala; National Council for Protected Areas)
COP	Conference of the Parties
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CPIC	Coalition for Private Investment in Conservation
CQC	C-Quest Capital
CRAF	Contrato de Desenvolvimento e Venda de Cotas de Reserva Ambiental para Entrega Futura (of Brazil; Contracts of Development and Sale of Legal Reserve Credits)
CRAs	Cotas de Reserva Ambiental (of Brazil; Environmental Reserve Credits)
CREP	Conservation Reserve Enhancement Program
CREST	Center for Responsible Travel
CRP	Conservation Reserve Program
CSAs	Certificados de Servicios Ambientales (Environmental Services Certificates)
CSD	Commission on Sustainable Development (of the United Nations)
CSF	Conservation Strategy Fund
CSP	Conservation Security Program
CSR	Corporate Social Responsibility
CTFS-ForestGEO	Center for Tropical Forest Science and Forest Global Earth Observatories (of the Smithsonian Tropical Research Institute)
DBH	Diameter at Breast Height
DFI	Development Finance Institution
DIB	Development Impact Bond
DOC	Department of Conservation (of New Zealand)
DOD	Disbursed and Outstanding Debt
DOPA	Digital Observatory for Protected Areas
DRC	Democratic Republic of the Congo

DSIRE	Database of State Incentives for Renewables & Efficiency
EAI	Enterprise for the Americas Initiative
EBRD	European Bank for Reconstruction and Development
EDF	Environmental Defense Fund
EIB	Environmental Impact Bond
EIB	European Investment Bank
EII	Earth Innovation Institute
EMA	Environmental Markets Association
EPRI	Electric Power Research Institute
EQIP	Environmental Quality Incentives Program
EROS	Earth Resources Observation and Science
ESG	Environmental, Social and Governance
ESI	Environmental Services, Inc.
ETF	Exchange Traded Fund
ETFRN	European Tropical Forest Research Network
EU ETS	European Union Emissions Trading System
EU	European Union
FAN	Fundación Amigos de la Naturaleza (of Bolivia; Friends of Nature Foundation)
FAO	Food and Agriculture Organization of the United Nations
FAS	Fundação Amazonas Sustentável (The Sustainable Amazonas Foundation)
FASB	Financial Accounting Standards Board
FAST	Finance Alliance for Sustainable Trade
FCMC	Forest Carbon, Markets and Communities (of USAID)
FCPF	Forest Carbon Partnership Facility (of World Bank)
FDN	Fundación Defensores de la Naturaleza (Nature Defenders Foundation)
FECAR	Federación de Comunidades Agropecuarias de Rurrenabaque (The Federation of Agricultural Communities of Rurrenabaque)
FFI	Fauna and Flora International
FLEGT	Forest Law Enforcement, Governance and Trade (of the European Union) Regulation
FOLU	Forestry and Other Land Use

FONAFIFO	Fondo Nacional de Financiamiento Forestal (of Costa Rica; The National Forestry Financing Fund)
FONAG	Fondo para la Protección del Agua (of Ecuador; The Water Protection Fund)
FPIC	Free, Prior, and Informed Consent
FRM	Financial Risk Manager
FSC	Forest Stewardship Council
FSM	Federated States of Micronesia
FUNBIO	Fundo Brasileiro para a Biodiversidade (The Brazilian Biodiversity Fund)
GARP	Global Association of Risk Professionals
GATT	General Agreement on Tariffs and Trade
GBIF	Global Biodiversity Information Facility
GBM	Green Belt Movement
GCF	Governors' Climate & Forests Task Force
GCF	Green Climate Fund
GCP	Global Canopy Programme
GDFCF	Guanacaste Dry Forest Conservation Fund
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GEMS	Global Environmental Monitoring Systems
GHG	Greenhouse Gas
GHG-IQ	Greenhouse Gas Inventory Quantifier
GIIN	Global Impact Investing Network
GMO	Genetically Modified Organism
GRASP	Great Ape Survival Partnership
GRID	Global Information Resource Database (of UNEP)
GSTC	Global Sustainable Tourism Council
Gt	Gigaton
GtCO ₂ eq	Gigaton of Carbon Dioxide Equivalent
GTPS	Grupo de Trabalho da Pecuária Sustentável (of Brazil; Roundtable for Sustainable Livestock)
HDI	Human Development Index
IAATO	International Association of Antarctica Tour Operators
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute of the Environment and Renewable Natural Resources)

IBAT	Integrated Biodiversity Assessment Tool
iBOL	International Barcode of Life Project
ICAO	International Civil Aviation Organization
ICBP	International Council for Bird Preservation
ICCN	Institut Congolais pour la Conservation de la Nature (Congolese Institute for the Conservation of Nature)
ICE	Intercontinental Exchange
ICFC	International Conservation Fund of Canada
ICRAF	International Council for Research in Agroforestry (Now known as World Agroforestry Centre)
ICROA	International Carbon Reduction & Offset Alliance
IDB	Inter-American Development Bank
IDESAM	Instituto de Conservação e Desenvolvimento Sustentável do Amazonas (Institute for Conservation and Sustainable Development of Amazonas)
IETA	International Emissions Trading Association
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFF	Intergovernmental Forum on Forests
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IICA	Inter-American Institute for Agricultural Science
IISD	International Institute for Sustainable Development
ILC	International Land Coalition
ILO	International Labor Organization
IMAFLOA	Instituto de Manejo e Certificação Florestal e Agrícola
INBio	Instituto Nacional de Biodiversidad (of Costa Rica; National Institute of Biodiversity)
INCIS	International Carbon Investors and Services
INCRA	Instituto Nacional de Colonização e Reforma Agrária (of Brazil; National Institute for Colonization and Agrarian Reform)
INDC	Intended Nationally Determined Contributions
INOBU	Institut Penelitian Inovasi Bumi (Earth Innovation's Research Institute)
INPE	Instituto Nacional de Pesquisas Espaciais (Brazilian National Institute of Space Research)

IP	Intellectual Property
IPAM	Instituto de Pesquisa Ambiental da Amazônia (Amazon Environmental Research Institute)
IPF	Intergovernmental Panel on Forests
IRR	Internal Rate of Return
IRS	Internal Revenue Service (of the United States)
ISI	Import Substitution Industrialization
ISO	International Organization for Standardization
ISSP	International Society of Sustainability Professionals
ITMOs	Internationally Transferred Mitigation Outcomes
ITR	Imposto Territorial Rural (of Brazil; Rural Land Tax)
ITT	Ishpingo-Tambococha-Tiputini
ITTO	International Tropical Timber Organization
IUCN	International Union for the Conservation of Nature
JGI	Jane Goodall Institute for Wildlife Research, Education and Conservation
KAZA	Kavango—Zambezi Transfrontier Conservation Area
KBAs	Key Biodiversity Areas
KCSO	Kosrae Conservation & Safety Organization
KFS	Kenya Forest Service
KIRMA	Kosrae Island Resource Management Authority
KWS	Kenya Wildlife Service
LEED	Leadership in Energy & Environmental Design
LGX	Luxembourg Green Exchange
LIBOR	London Interbank Offered Rate
LIP	Landowner Incentive Program
LLC	Limited Liability Company
LLP	Limited Liability Partnership
LOI	Letter of Intent
LSE	London Stock Exchange
LWCF	Land and Water Conservation Fund
LWG	Leather Working Group
MAB	Man and the Biosphere
MBF	Madagascar Biodiversity Fund
MBG	Missouri Botanical Garden
MCHT	Maine Coast Heritage Trust

MCL	Monteverde Conservation League
MCT	Micronesia Conservation Trust
MDG	Millennium Development Goal
MFGA	Massachusetts Fish & Game Association
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MRV	Monitoring (or Measuring), Reporting, and Verification
MT	Megaton
Mt	Metric Tonne or Metric Ton
mtCO ₂ e	Metric Tons of Carbon Dioxide Equivalent Emissions
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NAWCA	North American Wetland Conservation Act
NBSAPs	National Biodiversity Strategies and Action Plans
NDC	Nationally Determined Contributions
NGO	Nongovernmental Organization
NICFI	Norway's International Climate and Forest Initiative
NMBA	National Mitigation Banking Association
NMTC	New Market Tax Credit
NORAD	Norwegian Agency for Development Cooperation
NOX	Nitrogen Oxide
NPV	Net Present Value
NRCS	Natural Resources Conservation Service
NRDC	Natural Resources Defense Council
NRPA	National Recreation and Park Association
NTFPs	Non-Timber Forest Products
NWF	National Wildlife Federation
NY	New York
OCF	Observatório do Código Florestal (of Brazil; Forest Code Observatory)
OCS	Offsetters Climate Solutions
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OFI	Orangutan Foundation International
ONF	Office National des Forêts (of France; National Forests Office)

ONFI	Office National des Forêts International (The International Branch of the French National Forestry Office)
OPIC	Overseas Private Investment Corporation
ORCP	Orangutan Research and Conservation Project
OTS	Organization for Tropical Studies
PBF	Performance-Based Financing
PDs/PDDs	Project Documents/Project Design Documents
PEFC	The Programme for the Endorsement of Forest Certification
PES	Payments for Ecosystem Services
PFT	Pacific Forest Trust
PMI	Project Management Institute
PMP	Project Management Professional
PPCDAm	Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal (of Brazil; The Action Plan for Prevention and Control of Deforestation in the Legal Amazon)
PPP	Public-Private Partnership
PRA	Participatory Rural Assessment or Appraisal
PRI	Program-Related Investment
PRODES	Projeto de Monitoramento do Desflorestamento na Amazônia Legal (Legal Amazon Deforestation Monitoring Project)
QIT	Quebec Iron & Titanium
QMM	QIT Madagascar Minerals
RAN	Rainforest Action Network
RBF	Results-Based Financing
RCF	Rainforest Conservation Fund
REDD/REDD+	Reducing Emissions from Deforestation and forest Degradation. The “+” designates REDD and the additional activities of forest conservation, sustainable forest management, and the enhancement of carbon stocks.
RedLAC	Latin American and Caribbean Network of Environmental Funds
REIT	Real Estate Investment Trust

RFF	Resources for the Future
RFP	Request for Proposal
ROW	REDD Offset Working Group
RRTTLLU	Risk, Return, Time (Horizon), Taxes, Liquidity, Legal and Unique
RSPB	Royal Society for the Protection of Birds
RSPO	Roundtable on Sustainable Palm Oil
RTRS	Round Table on Responsible Soy
SCB	Society for Conservation Biology
SCS	Scientific Certification Systems, Inc. (now doing business as SCS Global Services)
SDGs	Sustainable Development Goals (of the United Nations)
SEI	Stockholm Environmental Institute
SES	REDD+ Social and Environmental Safeguards (SES) Standard
SFD	Sabah Forestry Department
SFI	Sustainable Forestry Initiative
SFS	School for Field Studies
SIB	Social Impact Bond
SIMAB	Smithsonian Institution's Monitoring & Assessment of Biodiversity Program
SINAC	Sistema Nacional de Áreas de Conservación (Costa Rica's National System of Conservation Areas)
SISA	Sistema de Incentivos para Serviços Ambientais (of Acre, Brazil; The State System of Incentives for Environmental Services)
SLOSS	Single Large or Several Small
SMART	Spatial Monitoring and Reporting Tool
SOS	Sumatran Orangutan Society
SOX	Sulfur Oxide
SPV	Special Purpose Vehicle
SRI	Sumatran Rainforest Institute
STRI	Smithsonian Tropical Research Institute
TAF	Technical Assistance Facility
TBPA	Transboundary Protected Area
TEEB	The Economics of Ecosystems and Biodiversity
TFCA	Transfrontier Conservation Area

TFCA	Tropical Forest Conservation Act (of the United States)
TFT	The Forest Trust
TIES	The International Ecotourism Society
TIMO	Timber Investment Management Organization
TIST	The International Small Group & Tree Planting Program
TNC	The Nature Conservancy
TNS	Tri-National de la Sangha
TPA	Totally Protected Areas
TPL	Trust for Public Land
TRASE	Transparency for Sustainable Economies
TREES	Tropical Ecosystems Environment Observation by Satellite
TTOR	Trustees of Reservations
UCs	Compensação em Unidades de Conservação (of Brazil; Consolidation of Conservation Areas)
(U)HNWI	(Ultra)-High-Net-Worth Individual
UK	United Kingdom
UMD	University of Maryland
UN	United Nations
UNC	University of North Carolina
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNWTO	United Nations World Tourism Organization
US/USA	United States/United States of America
USAID	United States Agency for International Development
USD	United States Dollar
USDA FS	United States Department of Agriculture Forest Service
USDA	United States Department of Agriculture
USGBC	US Green Building Council

VCS/VCSA	Verified Carbon Standard/Verified Carbon Standard Association
VERs	Verified Emission Reductions
VPA	Voluntary Partnership Agreements
VVB	Validation/Verification Body
WAVES	Wealth Accounting and the Valuation of Ecosystem Services (of the World Bank)
WBCSD	World Business Council for Sustainable Development
WCED	World Commission on Environment and Development
WCN	Wildlife Conservation Network
WCS	Wildlife Conservation Society
WHC	Wildlife Habitat Council
WHIP	Wildlife Habitat Incentives Program
WHRC	Woods Hole Research Center
WICE	World Industry Council for the Environment
WOCAT	World Overview of Conservation Approaches and Technologies
WRI	World Resources Institute
WRP	Wetlands Reserve Program
WTO	World Trade Organization
WWF	World Wildlife Fund (also known as World Wide Fund for Nature)
Y.E.L.A.	Yela Environment Landowners Authority
YOSL—OIC	Yayasan Orangutan Sumatera Lestari—Orangutan Information Centre
ZAR	South African Rand
ZSL	Zoological Society of London
ZSM	Zoological Society of Milwaukee

To review the official US Government Finance and Carbon Markets Lexicon used by the US Agency for International Development's Forest Carbon, Markets and Communities program, see here (<http://www.fcmsglobal.org/documents/FinanceandCarbonMarketsLexiconFinal40clean.pdf>) for English and here (<http://www.fcmsglobal.org/documents/Carbonlexico-Spanish%20V1-0.pdf>) for Spanish.

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