

Voluntary Carbon Markets

The Ecosystem Marketplace seeks to become the world's leading source of information on markets and payment schemes for ecosystem services (services such as water quality, carbon sequestration and biodiversity). We believe that by providing reliable information on prices, regulation, science, and other market-relevant factors, markets for ecosystem services will one day become a fundamental part of our economic system, helping give value to environmental services that, for too long, have been taken for granted. In providing useful market information, we hope not only to facilitate transactions, but also to catalyze new thinking, spur the development of new markets, and achieve effective and equitable nature conservation. The Ecosystem Marketplace is a project of Forest Trends.

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Voluntary Carbon Markets
An International Business Guide to
What They Are and How They Work

Written and edited by
Ricardo Bayon, Amanda Hawn
and
Katherine Hamilton

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Acknowledgements

Ricardo Bayon

Like most books, this one is years in the making and has many parents. It was first born, however, of the realization that, while there was much talk of the regulated carbon markets, the voluntary markets were being left behind. This, despite the fact that these markets appeared to be growing rapidly. But knowing that something needed to be done and getting it done were two very far-removed destinations. Getting the book to this stage would simply not have been possible without the unflagging support of Michael Jenkins and the rest of our colleagues at Forest Trends. Likewise, none of this would have happened were it not for the generous contributions of many donors to the Ecosystem Marketplace. These include:

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Katherine Hamilton

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Foreword

The serious debate over the climate crisis has now moved on from the question of whether it exists to how we can craft emergency solutions in order to avoid catastrophic damage.

The debate over solutions has been slow to start in earnest because some of our leaders still find it more convenient to deny the reality of the crisis. The hard truth for the rest of us is that the maximum that seems politically feasible still falls far short of the minimum that would be effective in solving the crisis.

T. S. Eliot once wrote:

Between the idea and the reality, Between the motion and the act Falls the Shadow. Between the conception and the creation, Between the emotion and the response Falls the Shadow.

Leaders must try to shine some light on a pathway through this terra incognita that lies between where we are and where we need to go.

Outside of the Kyoto Treaty, business leaders in both political parties have taken significant steps to position their companies as leaders in addressing this crisis and have adopted policies that not only reduce CO₂ but make their companies zero carbon. Many of them have discovered a way to increase profits and productivity by eliminating their contributions to global warming pollution. A key contributor to the movement to freeze and then reduce carbon emissions and a remarkable area of commercial and policy innovation, is the voluntary carbon market.

Voluntary Carbon Markets by Ricardo Bayon, Amanda Hawn and Katherine Hamilton describes a remarkable area of innovation in the fight to control global warming pollution in describing the foundations upon which many promising carbon reducing strategies have been built. And in the current absence of a worldwide regulatory system for carbon reduction, *Voluntary Carbon Markets* also foreshadows the factors which will drive the next generation of market-based innovation for fighting global warming pollution. I commend the work of Ricardo and the Ecosystem Marketplace Group for jumping into T. S. Eliot's void and shining the light on this important market.

The climate crisis is not a political issue. It is a moral issue. It affects the survival of human civilization. It is not a question of left versus right; it is a question of right versus wrong. Put simply, it is wrong to destroy the

habitability of our planet and ruin the prospects of every generation that follows ours.

What is motivating millions of global citizens to think differently about solutions to the climate crisis is the growing realization that this challenge is bringing us unprecedented opportunity.

This is an opportunity for transcendence, an opportunity to find our better selves and in rising to meet this challenge, create a better brighter future – a future worthy of the generations who come after us and who have a right to be able to depend on us.

Al Gore

List of Acronyms and Abbreviations

BEF	Bonneville Environmental Foundation
CBD	Convention on Biological Diversity
CCAR	California Climate Action Registry
CCB	Climate, Community and Biodiversity Alliance
CCX	Chicago Climate Exchange
CDM	Clean Development Mechanism
CDP	Carbon Disclosure Project
CEI	Community Energy Inc.
CER	Certified Emissions Reductions
CERES	Coalition for Environmentally Responsible Economies
CFI	Carbon Financial Instruments
CO ₂	carbon dioxide
COP	Conference of the Parties
CRS	Center for Resource Solutions
ERT	Environmental Resources Trust
ERUs	Emission Reduction Units
EU ETS	European Union Emission Trading Scheme
EUA	European Union Allowances
GHG	greenhouse gas
GPS	Global Positioning System
GSV	Gold Standard for Voluntary Emission Reductions (GSV)
GWh	gigawatt hours
GWP	global warming potential
IETA	International Emissions Trading Association
JI	Joint Implementation
kWh	kilowatt hour
MDGs	Millennium Development Goals
Mt	million tons
MWh	megawatt hour
NGO	non-governmental organization
NO _x	Nitrogen oxides
NPA	Natural Protected Area (in Mexico)
NREL	National Renewable Energy Laboratory
NSW	New South Wales

PDA	Personal Digital Assistant
ppm	parts per million
REC	Renewable Energy Certificate
RECs	Renewable Energy Certificates
REN21	Renewable Energy Policy Network for the 21st Century
RGGI	Regional Greenhouse Gas Initiative
ROCs	Renewable Obligation Certificates
RPS	Renewable Portfolio Standards
SO ₂	sulfur dioxide
SRI	Socially Responsible Investment
tCO ₂ e	metric tons of carbon dioxide equivalent
TIST	International Small Group and Tree Planting Alliance
UNEP	United Nations Environment Programme
VCS	Voluntary Carbon Standard
VER	Verified Emissions Reduction
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute

Introduction

After decades of searching for creative and innovative ways to protect the environment, it is time we be brutally honest with ourselves: We are losing this battle, and losing it in a spectacular way. Every day we hear that yet another species has gone extinct, yet another acre of forest has disappeared, and yet another coral reef has been destroyed. And as if that weren't enough, Earth has begun warming to such an extent that climate, sea levels, glacial ice, and even the polar ice caps may be in danger. It is enough to demoralize even the most determined optimist.

But this is a battle we cannot afford to lose – literally. It is time not to give up, but to redouble our efforts, to become more creative, and to seek new ways of working together in situations where confrontation is no longer effective (if it ever was). The time, in other words, has come for the environmental equivalent of the St Crispin's day speech in Shakespeare's *Henry V*, a call to arms that does not lament how difficult the task is likely to be – or how few of us there are – but rather pushes us forward into the wild and scary unknown.

And, in the case of the environmental movement, the scary unknown is the use of markets and market-like instruments to protect the environment. To be fair, we now have nearly two decades of experimentation in the use of market mechanisms for environmental protection. The US Acid Rain trading scheme began in the 1980s, and various forms of market-like mechanisms for environmental protection have been tried all over the world.

But the game is one of scale. Protecting one species, one piece of land, one watershed may be important, but it is no longer enough. The solutions today need to be systemic, they need to change the way we do business, the way we eat, drink, sleep, and think. And this is where we think markets may hold the greatest promise.

Some years ago, we created Forest Trends with a vision. Our vision was simple: we believed that by bringing loggers, environmentalists, business-people, academics, and scientists together into the same room to think about issues that mattered to all of them we would be better able to stem the loss of the world's forests. But we soon realized that – effective as this might be – it was not enough. We saw that in order to save the world's forests, society needed to value standing forests as least as highly as it values soybeans, cattle

ranches, logging operations, and the other alternatives driving deforestation. As the saying goes, in the end, we will only protect what we value.

Initially, some of our friends in the environmental movement accused us of heresy. How could we want to put a value on nature? Nature, they felt, is and should always be priceless. And while we agree with the sentiment, in practice, our economic system doesn't see nature as priceless, it assigns it a value, a value that is awfully close to zero. In short, our society (or at least our economic system) is confusing priceless with worthless.

Having come to the realization that we needed to 'internalize the economic value' (to use the academic jargon) of nature, we quickly saw that one of the most effective ways to achieve this was through the use of markets or market-like instruments.

And so in 2000 we brought together a small group of people from around the world in the beautiful mountains of New South Wales, Australia, in a town called Katoomba, to discuss the role markets and payments for ecosystem services had to play in forest conservation. True to our roots, we made sure this group included people from all walks of life: bankers, businesspeople, government officials, academics, community leaders, non-profits ... the entire spectrum. And from this meeting was born the Katoomba Group. At that time few people were talking about markets and payments for ecosystem services. Remember, this was five years before the European Union's Emissions Trading Scheme was but a glint in anyone's eye. Even Kyoto, at the time, looked set to flounder.

In this way, the Katoomba Group became a stimulating place to refine our vision, define our strategies, and so we continued to meet once or twice a year in either a large market for forest goods and services (London, Tokyo, Switzerland), or a large producer of these services (Brazil, Vancouver, Thailand). As time went by the group grew and our understanding of our subject deepened. We realized that what we were talking about went much further than forests, that it was a systemic problem affecting all ecosystems, and we realized that in order to thrive, environmental markets need science, finance, expertise, and, most especially, information. That is why we created the Ecosystem Marketplace, a tool that we hope will become a kind of 'Bloomberg' for the world's environmental markets.

All of this is a long-winded attempt to give you a bit of the background for the book you now hold in your hands. It was born of environmental need and it seeks to further deepen our understanding of one portion of the carbon markets that we think has been grossly overlooked: the voluntary carbon market.

But it is part of something bigger, part of our attempts to come up with (and better understand) a series of tools – environmental markets and market-like mechanisms – that may help us succeed where other tools have so far failed to conserve the ecosystems on which we all depend. So, once more into the breach, but this time, let's arm ourselves in the most effective way possible. Let's use markets – both voluntary and regulated – and payments for ecosystem services where they make sense to help us address climate change and other seemingly insurmountable problems. Because – like King Henry said at

Agincourt – one day, we will look back and either be happy we did, or else wish we had; the choice is ours.



Michael Jenkins
President,
Forest Trends



Ricardo Bayon
Managing Director
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