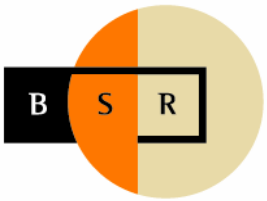

Business for Social Responsibility

Getting Carbon Offsets Right: A Business Brief on Engaging Offset Providers

Prepared
July 2007

About This Report

This report was written by Ryan Schuchard and Emma Stewart, Ph.D., of BSR's Research & Development team. Please direct comments or questions to Ryan Schuchard, Associate, Environmental Strategy, at rschuchard@bsr.org.

For background on the voluntary carbon market, please see: BSR (2006), "Offsetting Emissions: A Business Brief on the Voluntary Carbon Market." Available at www.bsr.org/meta/BSR_Voluntary-Carbon-Offsets.pdf.

For trends on prominent companies using carbon offsets to become carbon neutral, please see: BSR (2007), "Who's Going Carbon Neutral?" Available at www.bsr.org/CSRResources/Environment/ResourcesDocs/BSR_Carbon-Neutral-Chart.pdf.

About Business for Social Responsibility

Since 1992, Business for Social Responsibility (BSR) has been providing socially responsible business solutions to many of the world's leading corporations. Headquartered in San Francisco and with offices in Europe, China and Hong Kong, BSR is a nonprofit business association that serves its 250 member companies and other Global 1000 enterprises. Through advisory services, convenings and research, BSR works with corporations and concerned stakeholders of all types to create a more just and sustainable global economy. As a non-profit organization, BSR is uniquely positioned to promote cross-sector collaboration in ways that contribute to the advancement of corporate social responsibility and business success. For more information, visit www.bsr.org.

Note:

BSR publishes occasional papers as a contribution to the understanding of the role of business in society and the trends related to corporate social responsibility and responsible business practices. BSR maintains a policy of not acting as a representative of its membership, nor does it endorse specific policies or standards.

Introduction

Companies around the world are taking a closer look at their contributions to climate change,[1] with an increasing number voluntarily reducing their "carbon footprints" by purchasing offsets elsewhere. In a practice known as offsetting, **businesses pay to outsource emissions reductions when it is more cost-effective or technologically feasible than doing so in-house.** The market for these voluntary offsets, fueled by corporate commitments to become "carbon neutral," is growing rapidly.[2]

Yet **offsets present a paradox**. **On one hand, they offer a cost-effective tool to reduce net emissions**, and there is indication that a progressively more carbon-constrained economy will lead to wider adoption of more regulated offset trading schemes.[3] Offsets also provide a resource to develop business synergies by strengthening brands, enhancing supply chain competitiveness and leveraging negotiations.

But as their popularity grows, so does criticism. Scientists confirm that 50% to 80% reductions in greenhouse gasses are needed by 2050 to avert "dangerous climate change."[4] This will require significant mitigation efforts,[5] and **critics argue that offsets do little to drive the internal business process innovations and systems-level changes needed**. Moreover, some say, offsets may lead to complacency or "absolve climate guilt," in turn forestalling the necessary commitments to new behaviors, policies and business practices.[6] Critics have likened corporate offsets to "bargaining with the devil" and putting "lipstick on a pig."[7]

Despite their drawbacks, however, carbon offsets — which are **creating the most complex commodity market in history**[8] — should not be ignored. With significant, sustained growth forecasted, innovative new financial instruments are driving "environmental finance" to become a strategic competitive dimension.[9] Around the world, increasingly diverse companies are finding that offsetting emissions is an important component of a broader investment portfolio in capital, information, relationships and options to address the pressures associated with climate change.

This Business Brief provides managers with a four-part framework for approaching retail offsets:

1) The Benefits and Costs of Offsetting
2) Selecting an Offset Provider
3) Partnerships with Offset Providers
4) Resources for Learning

1. The Benefits and Costs of Offsetting

The practice of offsetting carbon emissions voluntarily can lead to a number of benefits, including:

- Improved reputation and environmental credibility, particularly for customer-facing companies[10]
- Increased experience in voluntary carbon markets in anticipation of a carbon-constrained economy, particularly for large companies and those in emissions-intensive sectors[*]
- Enhanced credibility, dialogue and networks with industry groups and regulators in order to gain a hand in shaping policy[11]
- More internal attention on the environmental balance sheet
- Employees who are inspired and prepared to conserve and innovate [12]
- Opportunities to become a net emissions *reducer* and sell offsets to retail or compliance markets at a profit[13]

Despite these benefits, however, offsetting presents costs:

Fixed Costs

- Research into appropriate offset projects and providers, which may take months
- Corporate offset program design and administration, which may require additional staffing

Variable Costs

- Unit offset costs, which range from US$5/ton for nonstandard, unregulated verified (VER) offsets[14] to over US$50/ton for high-quality certified (CER) offsets sourced from compliance markets.[15] The July 2007 spot rate for the compliance-grade CER EUA, the trading unit for the European Trading Scheme, is US$29.50/ton.[16]

Risks

- Brand risk from being potentially accused of "greenwash." Negative environmental publicity may both lead to significant business costs and dissuade further investment in environmental leadership.

Securing credible retail offsets is more challenging than simply choosing the "best" one because there is disagreement around their definition and use. As standards and regulations emerge, managers should focus attention on the three areas where consensus is a prerequisite for a robust offset market, and where, because of uncertain stakeholder expectations, brand risk proliferates. These areas are: 1) Appropriate use of offsetting, 2) Legitimacy of offset projects, and 3) Assurance of final delivery of real offsets.

[*] Musier, Reiner (2007). "Managing the Mosaic," *Environmental Finance*.

1.1 Appropriate Use of Offsets

Given the limited effectiveness of offsets as a means for mitigating climate change, it is widely stated that businesses should "reduce what they can" before "offsetting the rest."[17] However, just what a company *can* feasibly reduce before employing offsets and what rules should guide the reductions "make-or-buy" decision have been generally unclear.

Guiding Principle: Consider offsets as one investment among a broader, diversified portfolio of strategic bets to mitigate and potentially adapt to climate change. Managers should ensure that offsetting occurs in addition to internal reductions and investments in renewable energy (see BSR's A Three-Pronged Approach to Corporate Climate Strategy) as well as work outside of the firm to lead systems changes with suppliers, customers, industry peers and policymakers. (Watch for BSR's report on this topic in August 2007).

Guiding Principle: Strive for high emissions reductions with a low percentage of those reductions coming from offsets. In doing so, describe how "in-house" reductions constitute the majority of emissions initiatives, and offer principles or rules that govern how offsetting is limited to being a residual driver. For example, offset investments may be described as a function of:

- *Reduction Objectives* – "In 2008, we aim to reduce company-wide emissions 500,000 MTCE (metric tons of carbon equivalent) with no more than 33% of reductions from offsets."

- *Reduction Investments* – "Our 'upgrade to efficiency' initiative includes $750,000 for capital investments and $250,000 for retrofits. We will match these internal reductions by no more than a 10% purchase of $100,000 from retail offsets."

- *Expected Reduction Outcomes* – "Offset purchases are funded by, and will not exceed, returns generated by energy efficiency improvements;" or: "Offset purchases are limited to no more than the equivalent volume of reductions made internally."

1.2 Legitimacy of Offset Projects

What, exactly, constitutes a legitimate offset project remains one of the field's most widely debated topics. However, a preponderance of unregulated technologies and contracts has made implementation of this so-called offset project "origination" contentious.

Guiding Principle: Ensure that offsets meet, by the company's best estimation, the following essential parameters:[18]

- *Additional:* Reductions are "surplus" offsets that would not have occurred under "business as usual"
- *Real:* Offsets are sourced from tangible, physical projects with evidence that they have or will imminently occur
- *Measurable:* Reductions are objectively quantifiable by peer-reviewed methodologies within acceptable standard margins of error

- *Permanent:* Reduction streams are unlikely to be reversed, with safeguards to ensure that reversals will be immediately replaced or compensated
- *Verifiable:* Performance is monitored by an independent third-party verifier with appropriate local and sector expertise
- *Enforceable:* Offsets are backed by legal instruments that define offsets' creation, provide for transparency and ensure exclusive ownership
- *Synchronous:* Offset flows are matched to emission flow time periods

Guiding Principle: Consider the qualitative "fit" for the company. Does the offset location make sense? How does it *look* to stakeholders – what would their most obvious objections be, and how can objections be answered? Given the firm's industry and culture, does it appear credible?

Guidance on whether to avoid particular project types is a little more difficult to provide, given the lack of consensus among the NGO and regulatory communities. There is particular controversy around afforestation, Renewable Energy Credits (RECs), and industrial efficiency allowances from regulated markets, all of which play important roles in a sustainable economy, but have trouble comprehensively meeting the parameters described above. Also, for offsets in general, questions remain about possible adverse impacts on ecosystems and communities from new offset projects.[19]

1.3 Assuring Final Delivery of Real Offsets

Given a viable offset reduction project, there still lacks a "mechanism that ensure(s) that offset buyers get what they pay for."[20] Critical issues include ensuring that offset "products" are advertised transparently, sold exclusively to one buyer and retired once sold.

Guiding Principle: Consider using only registered offsets, selecting providers that have both organization-level and project-level independent verification, and clarifying the provider's terms of "additionality," or, evidence that their project would not have occurred under business as usual. Providers may or may not clearly advertise these terms; managers should, however, inquire about them and feel comfortable with providers' responses before proceeding.

Guiding Principle: Understand the actors, communities and relationships involved in providers' proposed offset project(s). Some providers source offsets as brokers, while others professionally design and manage ("originate") offset projects. Many, however, fall somewhere in between, managing or advising some aspect of a given project. Learn more by inquiring about the provider's status as an investor and clarifying the extent of its presence at projects on the ground.

2. Selecting an Offset Provider

Like banks, carbon offset providers sell financial commodities and may also offer some value-added services. Unlike banks, however, offset providers' core product – the retail carbon offset – lacks generally accepted accounting principles to ensure reliable, comparable, consistent and material product information. The industry also lacks legal infrastructure to define offsets and ensure their exclusive ownership.[21] Globally, the carbon offset market remains inefficient, illiquid and opaque,[22] with essentially no secondary market for selling unused offsets back.

In this nascent commodity market, treat advertised claims about offset products skeptically. Select offset providers, instead, by more holistic organizational strengths that support the company's objectives and capabilities. Armed with an understanding of the three strategic issues, choose providers which best match the company's needs for: **1) Objective traits, 2) Subjective "fit" traits, and 3) Value-added services.**

2.1 Objective Traits

To understand a carbon offset provider's basic profile, examine the relative strengths of four essential traits: **Experience, headquarters and office location(s), project locations, and project types** offered.

Experience. Most providers are relatively young, with only a few providing offsets before 2000. Generally, older providers tend to offer more market perspective, technical expertise and upstream integration into origination projects. Newer providers, on the other hand, are likely to be more nimble and amenable to developing strategic alliances. While such traits are not universal, they may offer a general guide to trade-offs in assessing compatibility.

Headquarters and Satellite Office Location(s). As emissions markets globalize, most providers are willing to sell offsets to buyers nearly anywhere in the world. Their geographical center and reach, however, may provide clues into their political and cultural insights and physical proximity to certain clusters of industries. Consider two types of strengths: 1) Providers operating near the company or with experience in markets similar to the company's; and 2) Providers with intelligence, networks or other capabilities in markets that the company doesn't yet operate in, but may aspire to.

Project Locations(s). Many providers have project expertise in certain geographical areas. Generally, companies should be able to shop around for projects in various global locations, from distant, foreign countries to the company's home community. Keep in mind that some providers' project offerings change over time, and some providers may be able and willing to develop projects in new locations. Ensure that projects advertised are active or will imminently be developed.

Project Types. Offset providers differ in their understanding of what constitutes an attractive project, their capabilities for managing various project types, and preferred methods for developing credible projects in the absence of generally-accepted standards. Recalling that forestry and industrial efficiency allowances are controversial, understand what projects the provider believes in and has available for purchase. General project categories include:[†]

- *Energy Efficiency:* Also called direct fossil fuel reduction, includes installing new appliances, retrofits or systems, and industrial gas destruction. Providers selling offsets as cap-and-trade or other allowance retirements usually place them in this category.
- *Renewable Energy*: Also called indirect fossil fuel reduction, includes capital investments in wind, solar and other clean energy sources.
- *Methane Capture and Destruction:* Avoided methane emissions from landfill, livestock and coal mines.

[†] Categories based on project types most commonly represented by offset provider offers

- *Biological Sequestration*: Also called Land Use, Land Use Change and Forestry (LULUCF), includes developing natural vegetation, particularly through forestry, soil sequestration and other land use projects.
- *Biomass:* Capture of emissions from wood, plants and waste, and conversion to energy; projects may also commonly be considered energy efficiency and/or methane capture and destruction.

Profile of Key Offset Providers

Following are profiles including the four objective traits described for 50 leading global carbon offset providers:[‡]

Organization	Experience[§]	Headquarters Location	Satellite Office Locations	Project Locations	Project Types				
					Energy efficiency	Renewable energy	Methane capture	Bio. sequestration	Biomass
3 Phases	1994	USA (San Francisco)	USA	USA, BRA, MEX, IND, NZL, CHN	-	Y	Y	Y	-
AgCert	2002	IRL (Dublin)	USA (Melbourne), BRA (São Paulo), MEX (Mexico City), CAN (High River)	BRA, MEX	Y	-	Y	-	-
AtmosClear	2004	USA (Northborough)	-	USA	-	-	-	-	Y
Atmosfair	2003	DEU (Freiburg)	-	IND, THA, DEU, BRA, RSA	Y	Y	Y	-	Y
Blue Source	2001	USA (Holladay)	USA	USA	Y	Y	Y	Y	Y
Carbon Balanced (WLT)	2005 (1989)	GBR (Suffolk)	USA	ECU, IND	-	-	-	Y	-
Carbon Clear	2005	GBR (London)	-	NCA, KEN, ETH SUD, PHI	Y	Y	-	Y	-
Carbon Footprint	2005	GBR (Hampshire)	-	GBR, KEN, BRA, USA, AUS, IND	Y	Y	Y	Y	Y
Carbon Planet	2005	AUS (Adelaide)	AUS	*NA*	-	-	-	Y	-
Carbon Resource Management	2006	GBR (London)	CHN	CHN, IND, VIE	Y	Y	Y	Y	Y
Carbonfund.org	2003	USA (San Francisco)	-	USA, IND, NEP	Y	Y	-	Y	-
CarbonVentures	(1982)	USA (Princeton)	GBR, AUS, MAS	*NA*	Y	Y	Y	Y	-
CarbonZero	2006	CAN (Toronto)	-	CAN	Y	Y	-	-	-
Certified Clean Car	2005	USA (San Francisco)	-	USA	Y	Y	-	-	-
CleanAirPass	2005	CAN (Toronto)	CAN, USA	*NA*	-	-	Y	Y	-
Climat Mundi	2006	FRA (Paris)	-	ERI, IND, AUS	Y	-	-	-	Y
Climate Care	1998	GBR (Oxford)	-	IND, MEX, HON, KAZ, RSA, UGA	Y	Y	Y	Y	Y

[‡] Data was collected using primary and secondary sources represented by the provider.

[§] Notes: Experience column denotes year organization began providing offsets, except for data with parentheses, which indicate the year the parent organization was founded

NA: Not Available

Climate Focus	2004	NED (Rotterdam)	-	RSA, CRC, CHI, BOL, GBRR, BUL	Y	-	-	Y	Y
Climate Friendly	2003	AUS (Sydney)	-	TUR, NZL, AUS,	Y	Y	-	-	-
Climate Neutral Group	2002	NED (Arnhem)	-	ECU, JAM, HON, NIC, CZE, NED, GHA, TAN, MAS, NAG	Y	Y	Y	Y	Y
Climate Wedge	*NA*	FIN (Helsinki)	USA, GBR	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
co2balance.com	2003	GBR (Somerset)	-	GBR, KEN	Y	-	-	Y	-
Co2e (Cantor)	2000	GBR (London)	USA , BRA, CHI, MEX, IND, JPN, NZL	BRA	-	Y	-	-	-
Easy Being Green	2004	AUS (Strawberry Hills)	-	*NA*	-	Y	-	-	-
Easy Carbon	*NA*	CHN (Beijing)	-	CHN	*NA*	*NA*	*NA*	*NA*	*NA*
EcoSecurities	1999 (1997)	USA	GBR, IRL, NED, ESP, MEX, CHI BRA, INA, THA, MAL, CHN	CHN, BRA, INA, IND, THA, OTHERS	Y	Y	Y	Y	Y
Futuro Forestal	*NA*	DEU (Freiburg)	-	PAN	-	-	-	Y	-
Greenfleet	1997	AUS (Leongatha)	-	AUS	-	-	-	Y	-
GoZero (The Conservation Fund)	2000 (1985)	USA (Arlington)	-	USA	-	-	-	Y	-
Growaforest	*NA*	GBR (Lancashire)	-	GBR	-	-	-	Y	-
Impatto Zero	2003	ITA	-	ITA, CRC	-	-	-	Y	-
MMA Renewable Ventures	2000 (2001)	USA (San Francisco)	-	USA	Y	Y	-	-	Y
Moor Trees	1999	GBR (South Brent)	-	GBR	-	-	-	Y	-
MyClimate (The Climate Protection Partnership	2002	CHE (Zurich)	-	CRC, ERI, IND, INA, MAD, RSA, USA	-	Y	Y	-	Y
Native Energy	2000	USA (VT)	-	USA	Y	Y	Y	-	Y
Natsource	1999 (1997)	USA (New York)	USA, CAN, GBR, BOL, JPN	CHN, INA, GBR, Others	Y	Y	Y	Y	Y
Offsetters	2005	CAN (Vancouver)	-	RSA, IND, HON, MAD	Y	Y	-	-	-
Plan Vivo	*NA*	GBR (Edinburgh)	-	MEX, UGA, MOZ	-	-	-	Y	-
Prima Klima	2000 (1991)	DEU (Düsseldorf)	-	DEU, SVK, GBR, USA, ARG, ECU, CON, MAD, UGA, VIE	-	-	Y	Y	Y
Pure - the Clean Planet Trust	2006	GBR (London)	-	IND	Y	Y	Y	-	Y
Reforest the Tropics	*NA*	USA (Mystic)	-	CRC	-	-	-	Y	-
South Pole, Ltd.	2006	CHE (Zurich)	THA	(Global)	Y	Y	Y	Y	Y
Spectron Group	(1988)	USA (Jersey City)	GBR, DEU, SIN	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
Sustainable Travel International/My Climate	2002	USA (Boulder)	-	CRC, ERI, IND, INA, MAD, RSA, USA	Y	Y	-	-	Y
Terrapass	2004	USA (San Francisco)	-	USA	-	Y	Y	-	-
The Carbon Credit Company (3C)	2003	DEU (Bad Vibel)	DEU, CHI, USA	NZL, CHN, IND, TUR	Y	Y	Y	Y	Y

** Notes: Experience column denotes year organization began providing offsets, except for data with parentheses, which indicate the year the parent organization was founded
NA: Not Available

The CarbonNeutral Company	1997	GBR (London)	-	CAN, USA, MEX, GBR, DEU, HUN, BUL, MON, BHU, IND, ERI, UGA, MOZ	Y	Y	Y	Y	-
The Climate Trust	1999 (1997)	USA (Portland)	-	USA, ECU	Y	Y	-	Y	-
Trexler Climate + Energy Services	1997	USA (Portland)	-	USA, CHN	Y	Y	Y	Y	-
Vertis Environmental Finance	2001	HUN (Budapest)	CZE, POL	HUN	Y	-	-	-	-
Zerofootprint	*NA*	CAN (Toronto)	CAN, GBR	*NA*	-	Y	-	Y	-

2.2 Subjective "Fit" Traits

After assessing providers' general profiles, one can narrow their prospective fit by considering **industry experience, assurance model, offset product offer and price** where possible. These four dimensions provide critical questions for understanding the character of offset providers. They are, however, difficult to characterize generically, and thus firms should use these dimensions to frame an assessment based on their own unique business situations.

Industry Experience. Does the provider have relevant industry exposure or customer insights? Has the provider worked with competitors or have experience developing alliances in the industry? Likewise, can the provider, which may be a startup, be trusted to protect competitive interests? On balance, industry experience may be deemed attractive but not necessary.

Assurance Model. With standards emerging, providers use various voluntary methods, both third-party and internal, to drive design and implementation for various stages of the project. Consider how these methods are assured by looking for an independent perspective on three critical areas:

- Verification (or certification) of the specific offset reduction project
- Use of a registry to verify delivery of the offset
- Third-party auditing of the firm as an entity, or at least, of its project portfolio

Offset "Product Offer." Offsets represent varying degrees of diversification, with some as shares in a specific project, some diversified portfolios of the same project type, and others spread broadly across project types and locations. Diversified offsets may come from either reduction projects or "allowances" (usually from industrial energy efficiency reductions) retired from cap-and-trade markets like the Chicago Climate Exchange. The offset provider should transparently explain if and how offsets being sold have been diversified.

Offset Price. All else being equal, unit offset price matters. However, it is difficult to characterize corporate offset providers by price for two reasons. First, without consensus on offset standards, prices cannot be meaningfully compared without applying a subjective lens, such as stakeholder appeal of the project type. Second, unlike end-user consumers, businesses tend to purchase in volume where price is negotiable. Although offsets contracts are increasingly commodity-like, an inefficient market means that, all else being equal, same-size purchases will not always be the same price.

2.3 Value-Added Services

Once the company identifies providers that meet minimum requirements for brokering offsets, managers should consider the extent and what type(s) of value-added services are sought. While

some companies that have experience with offsets may seek a provider to act as a bare-bones offset broker, most will seek a provider to which they can outsource selected training, decision-making or external relations. Some offset-related value-added services include:

- *Entry-level guidance and support* for developing a credible and synergistic corporate offsetting strategy
- *Low-cost, high-volume purchases* for companies with offsetting experience
- *Co-marketing*, including managing public relations problems associated with possible criticism in the media or during carbon "market corrections"
- *Project development expertise* for conceiving, assessing the costs and benefits, and designing high-quality, customized offset projects
- *Technology management*, including Web site hosting and e-commerce
- *Niche or "gourmet" offset project sourcing and management*, particularly for those focused on sustainable development and co-generating community benefits
- *Environmental finance,* including experience and capabilities to buying, selling and structuring contracts for carbon emissions, other ecosystems securities and other broader financial instruments
- *Holistic corporate climate strategy development*, including quantitative and qualitative decision-making towards the relative investment in offsets
- *"Credibility partners"* that can work with business to understand the quality issues and complaints of watchdogs and other critics

3. Partnerships with Offset Providers

Most companies are engaging in offsets as part of a broader effort to understand, develop relationships for and invest in a carbon-constrained and physically changing world. Given this fundamentally strategic intent, offset providers' *real* value to many firms is not simply one-off contracts, but for their specialty in navigating the shifting world of financial-environmental convergence. For these firms, offset providers represent important prospects for developing strategic alliances.

Not surprisingly, the market for collaborative ventures is ripe. One reason is that the offset market is expected to be dynamic and collaboration gives leverage to capitalize on opportunities.[23] By one estimate, retail offsets may grow from 10 million-25 million to around 400 million MTCE from 2005-2010.[24] By partnering with offset providers, companies may get ahead of the curve on new technologies, access and penetrate new markets, design new joint ventures, and generate and protect new intellectual property.

A second reason for partnership proliferation is that the transition to a carbon-constrained business environment will necessarily involve some volatility, and partnerships allow companies to focus on their core expertise while managing risk and ignoring nonessential efforts.[25] As the traditionally separate spheres of the economy and environment converge, firms should expect certain waves of negative reaction, both from advocacy groups and the general public. Outsourcing guidance,

decision-making and communications to specialists allow companies to focus on their core strategies while proactively engaging offset markets and managing risks cost-effectively.

Successful partnerships will require one to step back from the extrinsic transaction – offsets and their advertised services – and consider how the company and offset provider can co-generate opportunities together. Keep these fundamental lessons in mind: [26]

- Partnerships with offset providers should yield direct benefits, but moreover, should create new opportunities
- Successful partnership arrangements emphasize collaboration over exchange, where companies and offset providers value each others' skills
- Formal control systems should not dominate, but rather interpersonal connections and internal learning should guide coordination

Getting offsets right means recognizing the increasing importance of the offset market, along with the non-standardized, risky and even controversial nature of this voluntary practice. Getting offsets right means knowing that while offsets provide an explicit financial instrument, most businesses find that the value of offsetting is directly tied to developing strategic environmental-financial management capabilities. Getting offsets right, in the end, means stepping back to appreciate that climate change is driving political, economic, social and technological shifts that are fundamentally changing businesses' relationship with the environment, and that offsets provide a qualitatively unique, yet minor lever for improving and sustaining financial and environmental performance.

4. Resources for Learning

Offset Basics

Broekhoff, Derik (2007). "Linking Markets for GHG Reductions: Can It Be Done?" Available at http://www.inece.org/emissions/dublin/Broekhoff.pdf.

Clean Air-Cool Planet (2006). "A Consumer's Guide to Retail Carbon Offset Providers." Available at http://www.cleanair-coolplanet.org/ConsumersGuidetoCarbonOffsets.pdf.

Ecobusinesslinks.com (2007). "Ecobusinesslinks.com Carbon Offset Survey." Available at http://www.ecobusinesslinks.com/carbon_offset_wind_credits_carbon_reduction.htm.

RMIT University (2007). "Carbon Offset Providers in Australia 2007." Available at http://www.global.rmit.edu.au/CarbonOffsets2007.pdf.

Business Guides to Offsetting

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Tufts (2007). "Voluntary Offsets for Air-Travel Carbon Emissions." Available at http://www.tufts.edu/tie/tci/pdf/TCI_Carbon_Offsets_Paper_April-2-07.pdf.

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Waage, Sissel and Stewart, Emma (2007). "Dipping Their Toes In." Available at http://environmental-finance.com/2007/0705may/dipping.htm.

Business Strategies for Climate Change and Offsetting

For more information about developing corporate strategies for climate change and offsetting, please contact BSR at +1-415-984-3200 or email at environment@bsr.org.

[1] Waage, Sissel and Stewart, Emma (2006). "A Three-Pronged Approach to Corporate Climate Strategy." Available at http://www.bsr.org/meta/BSR_Climate-Change-Report.pdf.
[2] BSR (2007). "Who's Going Carbon Neutral?" Business for Social Responsibility. Available at http://www.bsr.org/CSRResources/Environment/ResourcesDocs/BSR_Carbon-Neutral-Chart.pdf.
[3] Musier, Reiner (2007). "Managing the Mosaic," *Environmental Finance*.
[4] Intergovernmental Panel on Climate Change (2007). "Climate Change 2007: The Physical Science Basis."
[5] Pacala, S. and Socolow, D. (2004). "Stabilization Wedges: Solving the Climate Change Problem for the Next 50 Years with Current Technologies." *Science Magazine*.
[6] Referenced from http://www.economist.com/blogs/freeexchange/2007/03/another_stab_at_carbon_offsets.cfm
[7]Simon, Ellen (2007). "Understanding and Evaluating Carbon Offset Programs" and Travel Weekly (2007) "Carbon-neutral claim like lipstick on a pig, says Eos."
[8] Musier, Reiner (2007). "Managing the Mosaic," *Environmental Finance*.
[9] World Bank (2006). "State and Trends of the Carbon Market 2006." Available at http://carbonfinance.org/docs/StateoftheCarbonMarket2006.pdf.
[10] F&C Investments (2007). "F&C Guide to Offsetting." Available at www.fundworksinvestments.com/fn_filelibrary/File/Brief%20on%20Carbon%20Offset.pdf.
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