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## Taking environmental partnerships seriously

Ulrich Wassmer<sup>a,1</sup>, Guillaume Pain<sup>b</sup>, Raymond L. Paquin<sup>b,\*</sup>

#### **KEYWORDS**

Environmental partnership; Business environmentalism; Company collaboration; Corporate sustainability; Competitive cooperation

Abstract Increasingly, firms are integrating environmental sustainability into their business strategies. Yet, sustainability is a complex topic and many firms need to form environmental partnerships to access additional resources—in the form of investments, technologies, expertise, public image, and/or political influence—to develop competitive advantage. Environmental partnership decisions are difficult, however, because they often need to reconcile multifaceted sustainability issues with multilevel, and potentially divergent, strategic goals. To meet their intended objectives, companies should carefully consider the type of environmental partnerships and partners that can best meet their needs. Based on a review of the literature, interviews with executives responsible for environmental partnerships, and publicly available data, we find firms engage in three main types of environmental partnerships: innovation-seeking, legitimacy-building, and policy-influencing. Each type of partnership benefits from different types of resources and partner choices. Herein, we describe the advantages of each type of environmental partnership and partners that may best support them. Given that many firms develop environmental partnership portfolios, managing multiple environmental partnerships simultaneously, we also discuss the implications of our research for environmental partnership portfolios. © 2016 Kelley School of Business, Indiana University. Published by Elsevier Inc. All rights reserved.

# 1. Business sustainability: Opportunity and challenge

Strategically addressing sustainability issues—such as climate change, energy and resource efficiency, and natural resource depletion—is a critical part of

\* Corresponding author

E-mail addresses: guillaume.pain@concordia.ca (G. Pain), raymond.paquin@concordia.ca (R.L. Paquin)

the managerial agenda. Sustainability has become more important, at least in part, because executives realize the potential of sustainability for competitive advantage (Gordon, 2014; Porter & Kramer, 2011). The complexity of many sustainability issues, though, requires companies to develop environmental partnerships (EPs) with other organizations to access the strategically critical resources they need to influence market, social, and political forces. A key aspect of any successful EP is choosing the right type of partner. A well-chosen partner can supercharge a company's sustainability efforts, while a

<sup>&</sup>lt;sup>a</sup> EMLYON Business School, 69130 Écully, France

<sup>&</sup>lt;sup>b</sup> John Molson School of Business, Concordia University, 1455 De Maisonneuve Boulevard West, Montréal, Québec H1H 1L8, Canada

<sup>&</sup>lt;sup>1</sup> See afterword

poorly chosen one can scuttle even the best of intentions, potentially destroying firm value in the process. However, it is often difficult for firms to successfully engage in environmental partnerships because sustainability issues are multifaceted and require processing data from non-traditional business sources (Hahn, Preuss, Pinkse, & Figge, 2014). EP decisions are further complicated by the interaction of potentially divergent strategic goals at various levels, be they local, national, international, operational, functional, business, or corporate. This may be problematic to the extent that even traditional strategic alliances often begin "on an operational level as ad hoc responses to local business issues" (Wassmer, Dussauge, & Planellas, 2010, p. 78).

Based on a broad review of the literature, interviews with executives responsible for EPs, and publicly available data (press releases, media reports, etc.), we found that firms often develop EPs to:

- Reduce negative or generate positive environmental impact in ways that strengthen their competitive position; and
- Access specific resources that cannot otherwise easily be acquired or internally developed.

We also found three primary challenges complicating EP success:

- 1. Defining an EP's objectives;
- 2. Choosing an appropriate type of partner for the EP; and
- 3. Managing multiple EPs or an EP portfolio.

First, defining an EP's objective is crucial to selecting a partner. In exploring these challenges, firms tend to engage in three distinct types of EPs based on different sets of objectives—innovation-seeking, legitimacy-building, and policy-influencing—each requiring different partner qualities that, in turn, help clarify which types of partners to seek out.

Second, firms must select appropriate partners to support the EP's objective. In practice, firms partner with various types of organizations across sectors, including other companies (be these suppliers, customers, competitors, or companies outside their own industry); not-for-profit/non-governmental organizations (NGOs); governmental and regulatory agencies; and academic institutions such as universities or research institutes (Wassmer, Paquin, & Sharma, 2014). While there is no one-partner-fits-all approach, partners from each sector tend to have

certain strengths and weaknesses. Many times, firms overlook this point, hastening or skipping strategic assessment of a partner's ability to support the EP. Yet, to be effective, firms need to make thorough partner choices that support the particular EP and the firm's broader strategic collaborative environmental actions. Doing so requires managers to understand the nature of the three EP types (see Section 2.) and what resources different partner types can contribute.

Third, we observed that companies that successfully create a sustainability-based competitive advantage through their EPs often develop an EP portfolio—that is, they develop and manage multiple EPs simultaneously with a variety of partners and partner types. As an example of this multipartnership context, DuPont partnered with Plantic Technologies—a company specializing in starch-based polymers—to develop and sell renewably sourced polymers, and collaborated with lowa State University to enhance DuPont's biofuel production capabilities. DuPont has also partnered with many NGOs, including World Resources Institute and Global Harvest Initiative, to support other aspects of its sustainability-based strategy.

While it may sound easy enough, assembling an effective EP portfolio is no simple matter. Though ideally each EP will serve a firm's broader strategies, as with most strategic alliances, many EPs address specific functional needs and focus less on overall impact upon the company. For example, environmental, health, and safety departments may focus on measurable environmental change; marketing, on translating environmental action into improved company image and new sales; and R&D, on ecological product design. European and North American units may be at odds, with the former focused on enhancing national and EU regulatory compliance, and the latter on stalling or lessening state-level environmental standards. While each EP may create value, they may not interact well, potentially complicating broader firm-wide strategy. In an interview we conducted, one aerospace R&D manager stated: "We are responsible for the road map of the company in terms of where the R&D portfolio is going as regards environmental issues," yet could say little on how the roadmap and EPs affected other aspects of the business. Further, departments may compete for limited resources, potentially complicating how a firm manages individual EPs and supports its broader sustainability strategies through an EP portfolio. Understanding individual EP objectives and choosing the right partner type can help firms address potential pitfalls with individual EPs and anticipate EP interactions that can inhibit or facilitate assembling a portfolio of complementary EPs.

Our findings draw upon two streams of research. First, we performed a broad review of environmental partnership studies across a range of fields, including strategic management, entrepreneurship. industrial ecology, operations management, marketing, public policy, and administration. Second, we interviewed 17 North American-based executives responsible for EPs in their companies. We chose executives from industries where environmental partnerships are strategically important, including air transportation, environmental technologies, electronic products, media and publishing, pharmaceuticals, garments, manufacturing, and retail. We supplemented these two streams with a review of press and media reports of EPs over the past 15 years.

## 2. Defining EP objectives

Our research highlights three main EP types as distinguished by their objectives.

#### 2.1. Innovation-seeking EPs

Innovation-seeking EPs involve companies seeking new revenues and/or cost reductions through collaborating to innovate 'greener' products, processes, and services (Crane, 1998; Vachon & Klassen, 2006). We observed that companies that establish sustainability-based competitive advantage through innovation-seeking EPs are characterized by two attributes. First, they view sustainability as an innovation platform for enhancing revenues and/or reducing costs (Nidumolu, Prahalad, & Rangaswami, 2009; Rothenberg, 2007). As the vice president of business sustainability at a leading Canadian retailer stated: "Sustainability is most successfully employed as a strategic framework for innovation, value creation, and organizational enhancement." Second, the companies strategically leverage individual collaborations to support product, process, and/or business model innovations in line with their strategy. For example, consider Canadian plane and train manufacturer Bombardier, which developed EPs to integrate green innovation as part of its core strategy, using its 'design for environment' approach as a common platform to collaborate with many of its suppliers in developing new airplanes. Likewise, U.S. carpet manufacturer Interface assembled an 'eco dream team' of external sustainability experts to support green innovations. Leveraging Interface's structured, intensive investments, this EP helped the company develop over 100 product and process innovations—including climate-neutral carpets and product lifecycle analysis—and dramatically

increased profitability through massive cost savings and record-breaking sales (Lampikoski, 2012).

The resources companies seek to access from their partners through innovation-seeking EPs can. when combined with the company's own internal resources, create clear value and a competitive advantage in the marketplace. Such resources may either be tangible (e.g., equipment) or intangible (e.g., technology), and innovation-seeking EPs may also involve significant mutual exchange, sharing, and co-development of new EP-specific resources and a partner co-specialization through asset-specific investments. The latter is exhibited in Sapphire, a U.K.-based EP between tire manufacturer Michelin and cement manufacturer LaFarge; the two companies combined their respective expertise to profitably reprocess used tires into an alternative fuel source for LaFarge's cement kilns.

## 2.2. Legitimacy-building EPs

Legitimacy-building EPs involve companies partnering to support their social license to operate through enhancing environmental reputation and broader social legitimacy (Berger, Cunningham, & Drumwright, 2004, 2006). Successful companies in this context see EPs as a way to manage relationships proactively with civil society stakeholders—including the broader public, NGOs, media, local communities, etc.—and promote dialogue and cooperative approaches to addressing existing or mitigating future conflicts (Rondinelli & London, 2003; Stafford, Polonsky, & Hartman, 2000).

Companies seek partners whose resources may complement and combine with their own to create social value. Such partner resources are often intangible, such as expertise, reputation, and/or an ability to speak as a representative of or advocate for a particular environmental domain. As compared to the firm, these partners typically have a broader awareness of relevant social forces, and legitimacy to speak for and gain access to other relevant stakeholders and organizations (Yaziji, 2004).

We found two categories of legitimacy-building EPs. One-way resource transfers are EPs in which a company transfers resources to support an EP partner's own project. Consider the collaboration between Jacob, a Québec-based Canadian women's clothier, and Oxfam to design and sell Let's Rebuild Haiti Together t-shirts to raise money for Oxfam's efforts in the country following the devastating January 12, 2010 earthquake. Jacob also has ongoing collaborations with several Québec-based NGOs to distribute professional clothing to underprivileged women entering the workforce. Company donations, or corporate philanthropy, are a key type

of legitimacy-building EP for enhancing a company's reputation by helping others.

Two-way resource transfers occur when the partners exchange specific resources directly. An example is the partnership between Québecbased cleaning products company Savons Prolay and U.S.-based testing company UL to test and provide Ecologo certification for Savons Prolav's Bio-Vert line of home cleaning products. As an independent third party, UL's certification provides credibility to Bio-Vert's eco-branding efforts, bolstering its environmental reputation/legitimacy and helping it stand out among competitors. Following Québec's 2007 blue-green algae crisis, the demand for ecologically sound cleaning products skyrocketed; Bio-Vert—one of the few eco-certified cleaning products lines on the market at the time—enjoyed a sales increase of over 500% the following year. These examples suggest the potential for legitimacy-building EPs to create social value and support firms' broader social license in their respective communities.

## 2.3. Policy-influencing EPs

Policy-influencing EPs involve companies collaborating to influence policy makers regarding current or potential regulatory and policy decisions (Delmas & Terlaak, 2001). Companies often seek to influence political action to strengthen their own and/or weaken competitors' market position (Delmas & Montes-Sancho, 2010), frequently via policyinfluencing EPs. These EPs may attempt to create advantageous regulatory changes, ensure a clear set of rules within an industry, and/or defend their interests when sustainability issues jeopardize or impact a company (Gray & Stites, 2013). EPs of this type often provide firms, directly or indirectly, with the opportunity to dialogue with governmental and regulatory bodies. Firms heading such EPs tend to be leaders in strategically important industries and/or large employers. Smaller firms, or those in sectors seen as less important, may need the support of more-prominent firms if seeking to influence policy.

Similar to legitimacy-building EPs, firms developing policy-influencing EPs seek partners who can provide intangible resources such as political acumen, negotiation skills, and access to and influence with relevant policy makers. Partners may include other companies and lobbying firms, industry associations, or governmental and regulatory agencies. Companies can often enhance their influence with policy makers by partnering with other firms, developing common interests and positions as a basis for collaboration.

One Canadian example is the collaborative dialogue between airlines and NAV Canada, the company that operates Canada's civil air navigation, provides air traffic control and flight information services, and offers related aviation services. This alliance has led to many changes (e.g., shortening airport approach routes, changing flight itineraries) that have saved airlines money by reducing fuel use and lessening environmental impact via lower greenhouse gas emissions.

In this section, we have discussed three dominant EP types that differ in their main objectives. However, these distinct EP types share common features as they broadly seek to:

- Reduce negative or generate positive environmental impact in ways that strengthen a company's competitive position; and
- Access specific resources that cannot otherwise easily be acquired or internally developed (Table 1).

## 3. Determining partner characteristics

The second challenge to successful EPs lies in determining desirable partner characteristics. This, in turn, helps guide partner selection. Reflecting on an EP's objectives makes it easier to tackle this challenge, as the goal for partnership suggests the types of resources needed.

## 3.1. Innovation-seeking EPs

Given their desire for resources supporting competitive innovation, the most effective partner type for innovation-seeking EPs is often other companies; these may include suppliers, customers, competitors, or firms from other industries. Some innovation-seeking EPs, such as those involving in-depth R&D and/or commercialization of new technologies, may also find academic institutions to be an effective partner choice.

We discovered that innovation-seeking EPs tend to support sustainability-based competitive advantage through product, process, and business model innovations. Product-oriented, innovation-seeking EPs work to develop more sustainable products or services, often through some level of R&D collaboration. For example, Bombardier's supplier-based, innovation-seeking EPs influenced the design and production of its C-series jets, providing around 20% greater fuel efficiency as compared to previous models. Bombardier also developed EPs with research institutions—including Polytechnique Montréal, the Consortium for Aerospace Research

Table 1. EP characteristics and respective partner types\*

	Innovation-seeking EPs	Legitimacy-building EPs	Policy-influencing EPs
Motivation	Pressures stemming from the marketplace	<ul> <li>Pressures stemming from the civil society sector</li> </ul>	<ul> <li>Pressures stemming from the political sector</li> </ul>
Rationale	Enhance revenues and/or reduce costs	<ul> <li>Develop social license to operate by enhancing environmental reputation and social legitimacy</li> <li>Develop and strengthen relationships with civil society sector stakeholders to promote dialogue and resolve conflict</li> </ul>	Pre-empt regulatory threats and shape potential future regulations
Types of resources sought	Tangible and intangible resources that create economic value and that cannot be developed internally or acquired in the marketplace	<ul> <li>Reputational resources that create social value and enhance reputation and that cannot be developed internally or acquired in the marketplace</li> </ul>	Political resources that can help create social value and that are not available elsewhere and cannot be built internally
Common scopes	<ul> <li>Product innovation: Codevelopment of more sustainable products.         <i>Example: Bombardier EP with key suppliers</i></li> <li>Process innovation: Improvement of business processes. <i>Example: Bombardier—Cascades EP</i></li> <li>Business model innovation: Development of new business models that integrate sustainability principles.         <i>Example: Hewlett-Packard—Lavergne Group EP</i></li> </ul>	<ul> <li>One-way resource transfer: Corporate sponsorship of NGO projects, licensing of NGO name, NGOs champion firms' environmental actions and/or products.         <i>Example: HP Canada—Learning for a Sustainable Future EP</i></li> <li>Two-way resource transfer: Product enhancements. <i>Example: Savons Prolav—UL Ecologo EP</i></li> </ul>	• Industry-level multi- partner collaborations. Example: The Greener Aircraft Catalyst Project initiative between the Québec provincial government and aerospace companies (Bombardier Aerospace, Bell Helicopter Textron Canada, Pratt & Whitney Canada, among others)
Ideal partner types	<ul><li>Other companies</li><li>Academic and research institutions</li></ul>	• NGOs	<ul><li>Government agencies</li><li>Other companies</li></ul>
Partner characteristics	<ul> <li>Possess a high sustainability orientation and resources that help the company achieve a competitive advantage</li> <li>Support the collaboration's motivation to create economic and environmental value</li> <li>Be willing to exchange, share, and/or co-develop resources and capabilities to support the collaboration's objectives</li> <li>Be open to a formal contractual agreement concerning an economic transaction</li> </ul>	<ul> <li>Possess a sterling reputation</li> <li>Allow the company to use its own high external legitimacy in the civil society sector in support of the company's environmental activities</li> <li>Have a history of successful collaboration (i.e., not turning against its partners)</li> </ul>	Government agencies Have the power to shape industry rules and regulations Be willing to engage in dialogue Companies Share the same interests Do not mind sharing critical information with the other forprofit EP partners

<sup>\*</sup> Each of the three EP types presented in this article has certain characteristics that point toward one or more partner types that are most effective.

and Innovation in Québec (CRIAQ), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Royal Institute of Technology of Stockholm (Sweden)—to research additional new plane design features, further reducing fuel consumption.

Process-oriented, innovation-seeking EPs tend to focus on firms' internal or supply chain processes. In another example involving Bombardier, the firm partnered with Canadian paper company Cascades, known for its expertise in energy efficiency, to help reduce costs and environmental impact within its own operations.

Business model-oriented, innovation-seeking EPs seek to go further by embedding sustainability directly within a company's business model (Boons & Lüdeke-Freund, 2013). For example, as part of Hewlett-Packard's (HP) global Planet Partners program, HP partnered with Montréal-based engineering and environmental company Lavergne Group and Indiana-based plastics recycler Butler-MacDonald to develop a closed-loop approach within North America to collect and reprocess HP's used inkjet cartridges.

We found that successful innovation-seeking EPs often chose as partners firms or academic sector organizations with the following attributes:

- A high sustainability orientation and key resources to support the partnership;
- An ability to support the EP's specific goals by working to create simultaneous economic and environmental value; and
- A willingness to exchange, share, and/or co-develop the relevant resources and capabilities to support the EP.

Success within innovation-seeking EPs often also hinges on working toward a mutually shared vision of the EP itself—including its scope, key objectives, and primary activities—and on developing a strong level of trust among EP partners.

## 3.2. Legitimacy-building EPs

As shown, firms seek out legitimacy-building EPs to support sustainability-oriented legitimacy. Some EPs, such as the previously discussed Bio-Vert/Ecologo example, may directly support the firm's competitive message; others may complement a firm's core offerings. For example, through its partnership with Zerofootprint, Air Canada (AC) offers customers the option of offsetting their travel-related carbon impacts. While not core to

AC's services, this partnership creates awareness among customers and supports AC's sustainability-oriented message. And given the prominence of such partnerships in air travel (e.g., Air France with the GoodPlanet Foundation, Lufthansa and Swiss Air with MyClimate, British Airways with ClimateCare), AC could find itself at a disadvantage if it did not have an EP in this area.

These examples suggest that NGOs may be effective partner choices; however, there are several things to consider before making such a move. For instance, while NGOs have in recent years generally become more willing to collaborate with companies, many remain skeptical and may not be open with their partners. NGOs also seem more likely than other partner types to turn against a corporate partner or air their dissenting views in a public forum. Clorox faced such a situation when it partnered with Sierra Club in support of its Green Works line of cleaning products. Numerous Sierra Club members publicly complained about and fought against the collaboration. Similarly, Oxfam took to grassroots activism and social media to criticize Starbucks when their partnership to support rural Ethiopian coffee growers faltered. Such public dissent may even come from NGOs outside the partnership, as was the case when Greenpeace publicly attacked the partnership between the NGO Pollution Probe and Canadian grocer Loblaw to develop a 'green' line of Loblaw products (Westley & Vredenburg, 1991). Given these points, it is important to consider the particular history of a given NGO when selecting a partner.

We found that effective legitimacy-building EP partners ideally:

- Have a good reputation in the area of interest;
- Will leverage their reputation in support of the EP and the firm's related activities;
- Have a history of successful collaboration; and
- Will work with corporate partners to resolve issues as they arise.

## 3.3. Policy-influencing EPs

Companies pursuing policy-influencing EPs often seek partners that have relationships with, access to, and influence over relevant policy makers (Bonardi, 2011). As such, governmental and regulatory agencies frequently are considered preferred partners, since they can provide access to political resources.

Policy-influencing EPs are often multi-partner collaborations between governmental agencies and several companies. For example, the Greener Aircraft Catalyst Project involves Bombardier Aerospace, Bell Helicopter Textron Canada, Pratt & Whitney Canada, and other Ouébec aerospace firms partnering with the Québec provincial government to develop green aircraft technologies and influence policy making. These firms-and the Québec aerospace industry, more broadly-made a voice for themselves in provincial-level funding and policy decisions, including their provision of public R&D funding support and creation of international leadership in greener aviation. While ostensibly focused on provincial-level change, this EP also seeks to influence future international norms and regulations.

We found that successful partners in the policyinfluencing context:

- Can influence industry-relevant norms, rules, and regulations directly as policy makers or indirectly through access and lobbying influence;
- Share common or convergent interests with the partnering companies; and
- Will engage in dialogue and collaboration.

Firms partnering together to amplify their influence should:

- Have overlapping, though not necessarily shared, interests supporting collective engagement on key EP goals; and
- Be willing to share critical EP-relevant information with partnering firms to support the EP's goals.

## 4. Entering multiple partnerships: EP portfolios

Thus far, we have primarily discussed individual environmental partnerships. Yet in reality, the complexity of managing market, social, and political forces often leads companies to engage in multiple types of EPs simultaneously with different partners. As the aforementioned DuPont and Bombardier examples suggest, developing multiple EPs or an EP portfolio can substantially enhance a company's sustainability-based strategy efforts.

However, maintaining an EP portfolio poses a number of additional issues. As noted, firms often choose EPs and partners through functional and ad hoc approaches rather than firm-level strategy. Lack of clarity at the outset regarding an EP's objectives and/or partner selection criteria risks the success of the EP itself. Clearly defined EP objectives can guide partner selection by highlighting desirable partner qualities; this, in turn, supports a more rational assessment of potential partners in line with company objectives. Such consideration also helps assess whether a new EP and/or partner might negatively influence existing EPs.

Given the potential interdependencies among a company's various EPs and EP partners, firms likely will have to make trade-offs among the EPs in their portfolios. For example, partnering with a historically hostile NGO may serve a company's legitimacy yet potentially damage relationships among other EP partners should the NGO have conflicted relationships with them. In some sense, this risk is similar to firms managing separate strategic alliances with firms that are otherwise competitors. Conflict among EP partners—even when they do not collaborate directly on the same EP—may cause partners to end their collaborations with the focal company rather than accept such arrangements, potentially causing costly disruptions (Wassmer et al., 2010). More broadly, as suggested at the beginning of this article, managing an EP portfolio entails balancing individual EP and partner goals, as well as potentially conflicting functional and geographical strategic objectives and the company's overall sustainability strategy. Difficult even among conventional strategic alliances, this challenge can further be complicated as partners from multiple sectors (e.g., for-profit firms, NGOs, regulatory agencies) may be driven more by social, environmental, and/ or political concerns than by market considerations. Yet, as our examples suggest, successfully managing these potential conflicts through EP portfolios can drive meaningful sustainability-oriented advantage.

We found that companies that are successful at developing and managing EP portfolios can:

- Develop and manage different types of EPs and partners as is relevant to support company goals;
- Tie particular EP objectives to specific firm-level business and environmental objectives;
- Select EPs and partners that do not unnecessarily provoke conflict among existing EP partners; and
- Balance multiple and potentially conflicting goals of individual EPs and partners in ways that support each partner and, in turn, support the company's broader sustainability-based goals.

#### 5. Final remarks

Executives and managers have become aware of the competitive value of strategically addressing sustainability within their core businesses. As a result, companies have increasingly developed environmental partnerships (EPs) with various types of partners—other firms, public sector actors, and governmental agencies and regulators—to support innovation, manage reputation and social legitimacy, and influence policy decisions. A successful EP, though, requires a clear understanding of its objectives and the selection of partners most likely to support it. Also, for many companies, an EP portfolio may be required to support a company's sustainability-based strategies. Successfully balancing the objectives of individual EPs and partners through a coherent EP portfolio will support the creation of a robust, sustainability-based competitive advantage.

#### **Afterword**

Ulrich Wassmer passed away in December 2014. He was the lead author of this article at the time.

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