

REPUTATIONAL IMPACTS OF INTERNATIONAL RESEARCH AND INNOVATION

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2.5. Company-focused international R&I collaborations with social and environmental value

Companies integrate their collaborative R&I activities with social and environmental responsibility. This often occurs when there are international challenges that cannot be resolved or opportunities that cannot be seized through domestic collaboration. As a result, companies in collaboration with other international private and private sector organisations and communities engage in R&I activities (Hull & Rothenberg, 2008; Padgett & Galan 2010; Wagner, 2010; McWilliams & Siegel, 2000).

Coupling R&D with innovation that generates environmental and social impacts is evidenced to result in more positive corporate reputation and trust building among stakeholders, compared to only focusing on profit-oriented R&D initiatives. By positioning itself as a trusted R&D-intensive firm, the company enhances its competitive signalling across both national and international communities. This, in turn, bolsters its brand image as an innovative entity committed to creating value for society and the environment. Consequently, this leads to increased customer acceptance and confidence in its innovative products and services, as they are perceived to come from a socially and environmentally responsible company (Hull & Rothenberg, 2008; Padgett & Galan, 2010; De Silva et al 2024). Positive reputation thus generates financial, relational, research, innovation, social and environmental impacts [Figure 2.5]

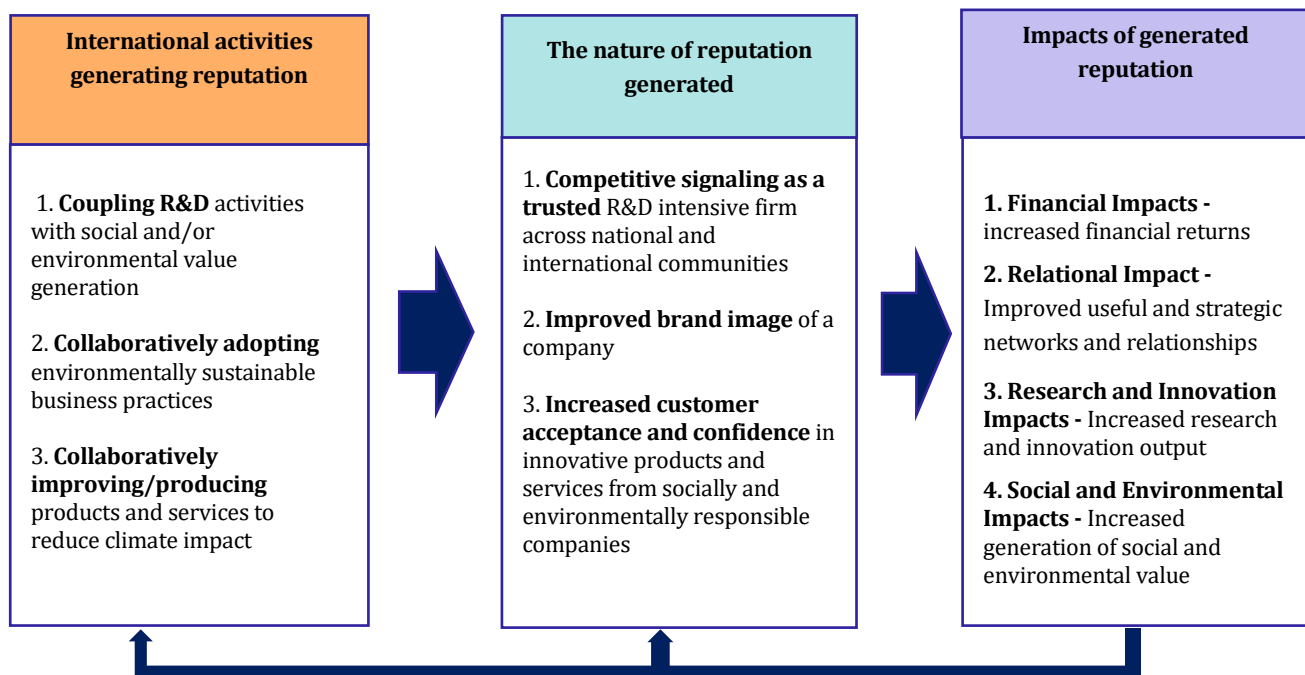


Figure 2.5: Company-focused international R&I collaborations with social and environmental value generating reputational impacts

2.5.1 International activities

» Coupling R&D activities with social and/or environmental value generation

Research increasingly acknowledges that companies' social and environmental responsibility activities and R&D are complementary (Branco & Rodrigues, 2006; McWilliams & Siegel, 2000; Padgett & Galan, 2010), and integrating them when possible is more advantageous (Chun, 2006; Padgett & Moura-Leite, 2012). Innovations that generate high social benefits alongside private gains create a balance that motivates companies to innovate, leading to increased profits while contributing positively to society (Wagner, 2010). Especially since many social and environmental challenges are global, companies are engaged in international R&I for such coupling of diverse values.

The Tres Cantos Open Lab Foundation, where companies, universities, and public sector organisations collaborate to discover drugs for neglected diseases in the developing world, is an example of this nature. At the Tres Cantos Open Lab Foundation, GSK collaborates with researchers from the University of Helsinki, University of Minnesota, Sapienza University of Rome, Weill Cornell Medical College, Durham University, Liverpool University, London School of Hygiene and Tropical Medicine, New York University, Northeastern University, Omnia Molecular and Seattle Biomedical Research Institute, and Centre for Cooperative Research in

Biosciences. In this collaboration, GSK aligns its profit generation objectives with a social mission in order to discover drugs for neglected diseases. The collaborators benefited from GSK's commercial expertise and resources and GSK benefited from other researchers advanced up to date knowledge and skills (De Silva et al 2019).

» Collaboratively adopting environmentally sustainable business practices

Companies engage in international R&I to reduce greenhouse gas emissions, develop climate-resilient practices, and promote the use of renewable energy, in order to address climate change and related responsibilities (Hoffman, 2005; Kolk and Pinkse, 2004; Wittneben and Kiyar, 2009). Investing in climate-resilient and resource-efficient assets offers a significant advantage under global warming pressures (Gasbarro et al., 2016). Considering the global nature of environmental sustainability practices international R&I can lead to greener business operations, offering more opportunities for companies to collaboratively discuss, share knowledge, and resources and adopt green strategies and practices (Wittneben & Kiyar, 2009). An example of such integrations is companies engaging in international R&I to reduce greenhouse gas emissions (Gasbarro et al., 2017; Patenaude, 2010; 2011) and to find solutions to the business impacts of climate change such as disruption to their operations, supply chains, and markets (Linnenluecke and Griffiths, 2010; Porter and Reinhardt, 2007; De Silva et al 2024).¹

» Collaboratively improving and/or producing products and services to reduce climate impact

While physical impacts from climate change pose major challenges to businesses, these challenges have also been transformed into business opportunities. Companies thus engage in international R&I to capitalize on climate-friendly market opportunities associated with green innovation (Pyke et al., 2012) and energy production methods (Gasbarro et al., 2016) can gain a competitive edge (Porter & Reinhardt, 2007). In recent years, many companies have invested in international R&I to develop new energy sources and production methods. UK-based energy companies such as ITM Power, BP and Octopus Energy are heavily involved in international R&I related to green hydrogen generation and renewable energy, engaging in multi-billion collaborative R&I projects globally. For example, BP, Aviva, Hastings Direct and Honda R&D Europe have developed a collaborative initiative in a shared research program to accelerate the evolution of future transport systems for smart cities (World Energy Investment 2020; Clean Energy Investment 2020).

By engaging in international R&I to align companies' products and services with climate-related market drivers and regulatory expectations, they can increase profit and mitigate the risks

¹ https://www.bp.com/en_gb/united-kingdom/home/news/press-releases/aviva-bp-hastings-direct-and-honda-r-and-d-europe-unite-to-accelerate-the-evolution-of-future-transport-systems-for-smart-cities.html

associated with negative environmental impacts (Hoffman, 2005; Kolk & Pinkse, 2004). This approach involves developing energy-efficient products and services (Wittneben & Kiyar, 2009). Improving the environmental performance of products and services can be achieved through cooperation with suppliers and customers (Zhu et al., 2008). By involving both international and national customers and suppliers in decision-making processes related to green issues, companies collaboratively innovate greener products and services (Teixeira et al., 2016).

2.5.1 The nature of the generated reputation

» Competitive signalling as a trusted R&D-intensive firm across national and international communities

Reputation is recognised as one of the most significant intangible resources that grant a firm sustainable competitive advantage (Padgett & Moura-Leite, 2012). There is a broad consensus that corporate social performance significantly influences a firm's reputation (QuevedoPueente, et al. 2007). Additionally, research indicates a positive correlation between firms' socially responsible activities, profitability, and R&D intensity (Hull& Rothenberg, 2008; Padgett & Galan, 2010; Surroca, Tribó & Waddock, 2009; Orlitzky, Schmidt & Rynes, 2003; Wood, 2010; Wagner, 2010). Therefore, R&D activities that generate social benefits have a greater positive impact on corporate reputation, image, and trust building compared to those that solely deliver R&D output. This is because R&D activities that generate social and environmental value are noticed by wider national and international stakeholders, who focus on the purpose of companies, in addition to shareholders, who predominantly focus on profitability (Padgett & Moura-Leite, 2012; Iglesias et al (2020). Many firms emphasize integrating R&D activities with social and environmental value generation as important to managing their reputation and cultivating reliability, trust, and integrity of their R&D intensity (Davies & Miles, 1998).

Additionally, joining international environmental alliances for R&I can lead companies to position themselves alongside reputed greener companies, enhancing their credibility and market signalling of their R&D capabilities to work with reputed partners (Gasbarro et al., 2016). Making the supply chain greener through international R&I partnerships and alliances demonstrates a commitment to sustainability, bolstering the company's reputation in the market (Li et al., 2014; Akhavan and Beckmann, 2017). The reputation gained by aligning a firm's R&D activities with social and environmental values thus serves as a strong competitive signal as a credible international R&I collaborator (Mackey et al., 2007).

» Improved brand image of a company

Collaboratively engaging in international R&I to implement strategies to address climate change, such as reducing greenhouse gas emissions, developing climate-resilient infrastructure, and

promoting renewable energy, not only build the reputation of R&D strength of the firm, but also can significantly boost a company's public relations and brand image (Hoffman, 2005; Kolk & Pinkse, 2004; Wittneben & Kiyar, 2009). This ensures business continuity in an era of greater focus on the climate. By changing business operations and behaviour to become greener through international R&I, companies can collectively strengthen their brand loyalty (Lash and Wellington, 2007; Wittneben & Kiyar, 2009). Implementing strategies and sharing resources to address climate change, as well as improving products and services that align with regulatory expectations and market drivers enhance the company's image (Hoffman, 2005; Kolk and Pinkse, 2004; Wittneben and Kiyar, 2009).

When companies operate across borders, they are more likely to have an international network to combine social and business elements, and thus develop levels of trust in their operations. In relation to multinational enterprises, developing trust in their host countries is crucial for success. Often host countries have a negative perception of multinational enterprises believing that they exploit host country resources. Yet, combining social activities with their host country's R&D could help multinational enterprises (MNE) overcome such negative reception and develop the brand image as a company creating value for society and the environment (Zhang et al 2024). An example is Siemens, a multinational enterprise that has established significant R&D operations in China that generate social and environmental value. Siemens collaborates with local universities and research institutions to develop advanced technologies in automation and digitalization. This collaboration has helped Siemens build a strong reputation in China as an innovator and a valuable contributor to the local economy. MNEs can leverage R&D activities in host countries to enhance their reputation and brand image by addressing local needs and contributing to societal and environmental goals (Le and Morschett, 2023).

» Increased customer acceptance and confidence in innovative products and services from socially and environmentally responsible companies

A firm's reputation is shaped by developing virtuous attributes (Chun 2006). A firm's socially beneficial R&D activities lead to greater acceptance by customers (Chun, 2006, Branco & Rodrigues, 2006; McWilliams & Siegel, 2000; Padgett & Galan, 2010). By integrating innovation activities and leveraging R&D knowledge with socially responsible attributes, firms differentiate themselves from competitors with greater appeal to customers (Ullah & Arslan, 2022; Fombrun & Shanley, 1990). Research shows that consumers prefer products with socially responsible characteristics. For example, the "Hybrid" version of Honda Accord- which has less negative environmental impact is more favored by consumers than the standard version (McWilliams, Siegel & Wright 2006). This highlights the significance of product differentiations based on social and environmental impacts in enhancing or maintaining the firm's reputation (McWilliams et al.,

2006). High-reputation firms are seen as offering greater value, which often enables them to charge higher prices for their products, and their customers tend to be more loyal (Keh & Xie, 2008). Therefore, international R&I that integrates social and environmental value offers firms the opportunity to increase acceptance and confidence in innovative products and services (Ullah & Arslan, 2022).

2.5.3 Impacts of reputation generated

Table 2.5: Impacts of reputation generated through international R&I collaborations with social and environmental value

Types of Impact	Specific Impacts
1. Financial Impact - Increased Financial returns	<p>Ensure business continuity in an era of greater focus on the climate</p> <p>Improved market valuation/ stock market price</p> <p>Increased availability of funding and other financial resources available for greener companies</p> <p>Reduced costs through the leveraging of increased opportunities for shared addressing of environmental challenges affecting the business</p>
2. Relational Impact - Improved useful and strategic networks and relationships	<p>Enhanced opportunities to access, strengthen, collaborate with, and develop new, useful networks</p> <p>Enhanced employee satisfaction</p> <p>Stronger relationships with stakeholders</p>
3. Research and Innovation Impacts - Increased research and innovation output	<p>Increased opportunities for collaboration</p>
4. Social and environmental impacts - Increased generation of social and environmental value	<p>Generating a stronger link between profit generation and social and environmental impacts leading to the simultaneous generation of business, social, and environmental value</p> <p>Increased opportunities for businesses to engage in policy-making and advisory roles</p>

Case Study: H&M's Journey to Reputation Building through Sustainability Initiatives

Fast fashion brands – such as H&M, Zara, and Forever 21 – launch new styles weekly or even daily instead of releasing clothes only for four seasons. Increasing demand for affordable clothing led to brands relying on supply chains that produce large quantities of synthetic and petroleum-based garments in developing countries. These practices have resulted in increased levels of greenhouse gases (GHGs) and landfill waste. Following a series of controversies about the impact of fast fashion production in the early 2010s, industry leaders started adopting various sustainability initiatives to become more eco-friendly. Therefore, H&M engaged in international R&I to reduce its environmental impact and build a reputation as an eco-friendly and sustainable brand.

»» *International R&I activities:*

H&M set ambitious goals for reducing greenhouse gas emissions by joining international R&I initiatives such as the [Sustainable Apparel Coalition](#) (SAC), SAC engages in international R&I by bringing together brands, retailers, manufacturers, NGOs, academics, and industry associations. This collective effort fosters the development of new materials, processes, and technologies that reduce environmental impact and improve working conditions.

Additionally, to become greener, H&M has re-evaluated and adjusted its business operations, and taken three measures including collaborating with industry leaders on R&I to comply with external sustainability standards, engaging in corporate social responsibility (CSR) projects within national and international communities, and enhancing transparency about their suppliers. H&M has adopted criteria for its suppliers that apply to its overall supply chain. H&M not only mandated suppliers to comply with the fundamental level defined for environmental consciousness, but H&M collaborated with international suppliers on R&I projects. H&M's Sustainable Impact Partnership Programme (SIPP), which rewards suppliers for sustainability compliance, fosters strong, collaborative relationships with its supply chain partners, ensuring mutual growth and sustainability. This collaboration often includes sharing best practices and innovations in sustainable production methods, which are developed through international R&I efforts.

H&M's commitment to sustainability through SIPP involves continuous research into new materials, processes, and technologies that can reduce environmental impact. H&M's international R&I initiatives include partnerships with research institutions and participation in global sustainability projects. These collaborations enable H&M to stay at the forefront of sustainable fashion innovation, ensuring that the company can continuously improve its practices and set new standards for the industry.

»» *The nature of reputational impacts generated:*

H&M communicates its environmental effort through annual sustainability reports which highlight the company's progress in reducing its impact in various areas, such as a 21% reduction in CO2 emissions from its operations between 2017 and 2020. Moreover, consumer surveys and market analyses enhance engagement with customers and enhance its position as an environmentally friendly brand in the sector. By involving stakeholders in decision-making processes and demonstrating a commitment to ethical practices, H&M builds trust and loyalty, which are crucial for reputation building and long-term success.

Sources: Wren, B. (2022); [Sustainable Apparel Coalition - Patagonia](#); [Sustainable Apparel Coalition and Social & Labor Convergence Program Elevate Collaborative Work to Transform Global Supply Chains — Social & Labor Convergence Program](#); [HM-Group-Sustainability-Disclosure-2021.pdf](#)



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