



## Teaching Note

# SC Johnson and the Greenlist™ Challenge

SC Johnson's patented Greenlist process formalizes the classification of raw materials used in the company's products according to their impact on the environment and human health. Greenlist facilitates the increased use of materials considered to be environmentally "better" and "best," while helping the company phase out the use of certain raw materials (rated a "Restricted Use Material" by the tool). The result is a process that assists with the continual improvement of the environmental profile of the company's products.

SC Johnson faces several challenges with Greenlist. Specifically, now that the process has been patented, the company needs to decide whether it wants to share the process and what is the best business model to do so. Another key question is how Greenlist can be embedded in the company's new product development process. Concern, especially on the part of the marketing department, exists on how to position an environmentally responsible product to a mass consumer audience. Finally, the case addresses whether or not Greenlist can be used to spur more fundamental or "disruptive" innovation toward inherently clean and sustainable materials.

### Suggested Readings

The following readings are suggested as lenses through which to view the case:

Stuart Hart and Mark Milstein (2003), "Creating Sustainable Value," *Academy of Management Executive*, 17(2): 56-69.

Stuart Hart (2005) *Capitalism at the Crossroads*, Upper Saddle River, NJ: Wharton School Publishing; Chapter 3.

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## Teaching Plan

The case should be distributed two to seven days prior to the class in which the case will be discussed. A discussion of the case and recommended readings can be stimulated with the following discussion questions:

1. Does sharing Greenlist with other companies create a conflict for SC Johnson?
2. Where does Greenlist fit on the Sustainable Value Framework?
3. What opportunities exist to expand Greenlist?

The class should begin with a discussion of whether sharing Greenlist with other companies creates a conflict for SC Johnson. Specifically, students should be directed to consider what competitive advantages the company derives from Greenlist and whether that advantage is sustainable. During this discussion, students should identify the costs and benefits of sharing this method with other companies, including competitors. Ultimately, students should answer the following question: what should Scott Johnson do with the patent? Encourage students to draw a connection between the competitive advantages SC Johnson derives from Greenlist and their recommendation of what to do with the patent.

The next two topics are the primary focus of the case and, therefore, merit significant time and attention. To start the discussion, ask students to contrast the various quadrants of the Sustainable Value Framework. Specific emphasis should be placed on pollution prevention, product stewardship, and clean technology. Then, have the students break into teams. Have a third of the class argue Greenlist is an example of pollution prevention, a third argue it is an example of product stewardship, and a third argue the tool is an example of clean technology. After the discussion, have the students vote on where they would place Greenlist on the Sustainable Value Framework.

This conversation will serve as the foundation for the last part of the in-class discussion, which focuses on the future of Greenlist. Two questions should be posed to the class.

1. How can SC Johnson expand Greenlist?
2. What can the company do to integrate Greenlist into its other sustainability initiatives—especially those at the Base of the Pyramid?

## Timing of an 80-minute class

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|---|----------------|
| 1. Distribution of the case                             | Prior to class |
| 2. Class administration                                 | 5 minutes      |
| 3. Discussion of sharing Greenlist                      | 15 minutes     |
| 4. Small team discussion of Sustainable Value Framework | 35 minutes     |
| 5. Sustainability vision and recommendation discussion  | 20 minutes     |
| 6. Conclusion   | 5 minutes      |

## Case Analysis

### 1. Does sharing Greenlist with other companies create a conflict for SC Johnson?

#### *Teaching Strategy*

Before students answer this question, they should be challenged to answer two underlying questions, which will ultimately shape how they answer whether sharing Greenlist creates a conflict. First, students should evaluate what competitive advantages SC Johnson derives from Greenlist and whether those advantages are sustainable. Because it is not a forgone conclusion that SC Johnson should or will share Greenlist with others, understanding how Greenlist benefits SC Johnson will help students decide whether sharing is a judicious choice. Students will probably note that Greenlist has had a positive impact on SC Johnson's relationship with regulatory agencies, such as the U.S. EPA. When teaching the case, encourage students to evaluate whether this is actually a sustainable competitive advantage.

Another underlying question for students to consider is: what should Scott Johnson do with the patent? Students should recommend how SC Johnson should use the patent before they evaluate whether the company will find itself in a conflicted position as a result of sharing it. A cost/benefit analysis could be appropriate at this point. Encourage students to evaluate what type of business model would be necessary to effectively share Greenlist; it is likely a service model would be required. Is it possible for SC Johnson to build and manage such a model? Does it make strategic sense for SC Johnson to operate a business based on Greenlist implementation, or would finding a partner and licensing the patent make more sense? Ultimately, these questions are to encourage students to understand what conflicts of interest may arise if SC Johnson shares Greenlist. Addressing how SC Johnson should be compensated for Greenlist—specifically, should the company receive a royalty payment every time Greenlist is implemented—may drive whether or not students believe a potential conflict exists.

#### *Analysis*

The most obvious competitive advantage that SC Johnson generates as a result of Greenlist is the close relationship the company has established with the U.S. EPA and other regulatory agencies. The company benefits from Greenlist in other ways, however. For example, SCJ has received awards and press coverage for Greenlist. Most importantly, Greenlist could have a strategic impact on how SC Johnson manages its supply chain. Ultimately, it could significantly influence the entire product development process.

Over time, Greenlist should reduce the variety of raw materials used by SC Johnson, especially as the company stops using restricted-use materials. As procurement becomes easier, SC Johnson likely will purchase greater volumes from fewer vendors. The company could benefit from “preferred customer” pricing policies (from certain vendors).

In addition to the purchasing advantages SC Johnson could generate, Greenlist also will make it easier for the company to signal what its raw material needs will be on a going-forward basis. To reduce its environmental footprint, the company will strive to increase the volume of “better” and “best” materials used. SC Johnson will, therefore, be able to describe the profile of the products that it would like its vendors to develop. The impact that Greenlist has on SC Johnson’s ability to manage its supply chain and vendor relationships could truly be a sustainable competitive advantage; however, at this point in time, it is not clear whether the company is using Greenlist in this way.

Other advantages SC Johnson derives from Greenlist may be timing related and are not likely to be sustainable. Specifically, in response to growing consumer demand, grocers and mass merchandisers (two key distribution channels for SC Johnson) are increasing their sales of organic as well as environmentally and socially responsible products. SC Johnson’s efforts in the areas of corporate social responsibility and sustainable global enterprise have made it possible for the company’s products to benefit from an increased shelf presence as well as a more cooperative outlook regarding in-store promotions. While SC Johnson could capitalize on such opportunities, the company should not rely on it as the source of its sustainable competitive advantage.

The question of what Scott Johnson should do with that patent is challenging. Having identified a unique and sustainable competitive advantage—namely the opportunity to streamline the company’s purchasing and to enhance its supply chain management—a compelling argument could be made that it is premature for SCJ to share the patent. By keeping the patent in-house, the company could fully leverage Greenlist to benefit its supply chain practices. Moreover, holding the patent in-house is a short-term decision; once SC Johnson is positive it has capitalized on every possible benefit, then the patent could be shared. Keeping the patent proprietary, however, could be contrary to the company’s culture of “Leading by Sharing.” Most likely, the company will take the necessary steps to share the patent, especially given SC Johnson’s history of sharing Greenlist with regulatory agencies and vendors. Consequently, students should outline what strategy the company should use to encourage sharing of the patent.

During this part of the conversation, students may find it helpful if the instructor points out that the business model necessary to support the patent is that of a consulting or business services firm rather than a manufacturing firm. Students should be challenged to consider whether SC Johnson is capable of operating a service model; the strategic notion of diversification is of key importance when considering what to do with the patent. Many companies have failed as the result of over-diversification; it is likely that the company is sensitive to this and, therefore, does not want to undertake developing and managing the sharing process.

Having navigated the conversation to this point, students should consider with whom the patent should be shared. This is an opportunity for students to be creative. Specifically, students should recall what they have learned about stakeholder engagement and should apply it to this question. Who would be the best partner in this venture? Would it be another business, a not-for-profit organization, the government, or

an NGO? How would the relationship between SC Johnson and the Greenlist licensee be structured? How will compensation issues impact SC Johnson? Is it a conflict of interest for the company to be compensated for this intellectual property?

Finally, having discussed the underlying issues, students will find it easier to address whether or not sharing Greenlist puts SC Johnson in a conflicted position. One could argue that sharing Greenlist is the right thing to do for the environment and is consistent with the company's values. Conversely, SC Johnson may be sharing Greenlist prematurely. Toyota, which historically has been very generous with sharing information with others, even its competitors, could be useful to the discussion. In Toyota's case, the company is motivated to share because it has always been proud of its manufacturing leadership, namely the Toyota Production System (TPS). Toyota knows that its real source of competitive advantage is not the mechanics of the TPS, but rather the subtle, tacit (even cultural) aspects of that system. It is very difficult to observe, let alone copy, these aspects of Toyota's system. That is one reason that no other car company has yet matched Toyota's quality performance despite extensive knowledge of the formal (codified) "system" the company employs.

For SC Johnson, this means that it is possible to share information with your competitors; however, sharing should only occur after the company has fully capitalized on whatever knowledge is being shared, including the thorough integration of the system into the more subtle processes and behaviors of the company and its employees. Several learning opportunities exist regarding Greenlist: notably, how SCJ can incorporate the tool into the new product development process and how the company can maximize the impact Greenlist has on its supply chain management practices. Consequently, SC Johnson may be better served by holding the patent close rather than sharing it at this point.

## **2. Where does Greenlist fit on the Sustainable Value Framework?**

### *Teaching Strategy*

During this component of the class, the students will break into small teams in order to prepare the following question: in which quadrant of the Sustainable Value Framework does Greenlist fit? The teams will need to prepare a short answer that they will present to the entire class. To catalyze student analysis, each team should be given some leading questions that will push their thinking to a more critical level.

### *Analysis*

Finding the appropriate place for Greenlist on the Sustainable Value Framework is challenging. While SC Johnson developed Greenlist as a clean technology initiative, students may disagree that this is where Greenlist fits on the Sustainable Value Framework. An argument can be made for Greenlist to fit in any of the quadrants; however, the most compelling case can be made for product stewardship. By contrast, the weakest case will be made in support of clean technology. Many students will agree that Greenlist is not an example of clean technology because they will gravitate to the idea that clean technologies should be disruptive. While a compelling case can be made

for Greenlist as an example of pollution prevention, the instructor should encourage students to think about the future of Greenlist. In contrast to many pollution prevention efforts, Greenlist creates opportunities for stakeholder engagement through sharing and increased transparency through quantifying and reporting the reduction. The next section of this analysis will outline the key arguments for and against Greenlist's placement in a particular quadrant of the Sustainable Value Framework.

**Clean Technology**—To accurately determine whether Greenlist is an example of clean technology, the class should explore if it is necessary for such an innovation to be disruptive. As with any new technology, the development and creation of a clean technology is an evolutionary process. Yes, disruptive innovations do occur; however, incremental innovations also can have a significant impact (i.e., there can be major incremental changes). Furthermore, the scientific method is based on incremental improvements. Classification of the new technology may be a matter of perspective: those removed from the development may see it as disruptive; those closer to the development may view it as simple and incremental. The Sustainable Value Framework emphasizes leapfrog technology as a defining component of clean technology. Thus, Greenlist may not be well suited for this quadrant.

That being said, Greenlist should be considered as an example of clean technology for two reasons: First, SCJ intended Greenlist to be a clean technology tool. Because the process relies upon systems-level thinking as well as the desire to develop new competencies, it could, indeed, be an example of such innovation. It may be interesting to see if student opinion is swayed once that fact is shared. While Greenlist is a process that relies upon incremental improvement, several key innovations can be identified within the process itself. Historically, rating systems have been lists of banned materials. Greenlist is a flexible database that scores raw materials. Moreover, a material's score depends on how that material is used in the final product. Thus, ingredients can be evaluated differently depending on whether they are being used as a surfactant, a preservative, or as packaging. A second reason Greenlist could be considered a clean technology pertains to the lifecycle of innovation. As with all technologies, the intellectual property associated with Greenlist has a distinct lifecycle. Is it possible that Greenlist was disruptive at the time of its creation and has since matured?

**Pollution Prevention**—Many students will label Greenlist as an example of pollution prevention. Greenlist functions to reduce the environmental footprint of the company's products and operations; isn't it obviously a pollution prevention tool? Greenlist is clearly more than just a process for reducing emissions and waste in the production process, however. Indeed, Greenlist has the potential to significantly influence both suppliers and final products. From this perspective, Greenlist is much more a process for product stewardship. (Sharing Greenlist is also an illustration of product stewardship, while embedding Greenlist into new product development may move the company toward clean technology.) Another argument against Greenlist as an example of pollution prevention is the fact that SC Johnson is sharing Greenlist with the U.S. EPA! Greenlist was not created in response to regulatory action; in fact, it is considered so advanced

that the regulatory agencies are approaching SC Johnson for information. Thus, to place Greenlist exclusively in the pollution prevention quadrant of the Sustainable Value Framework reflects a superficial analysis.

**Product Stewardship**—Finally, it is necessary to consider whether Greenlist fits in the product stewardship quadrant of the Sustainable Value Framework. Many of the arguments above apply here. By allowing SC Johnson to measure and report how its environmental footprint is being reduced over time, Greenlist serves to increase transparency between the company and its stakeholders. Indeed, its potential impact on both suppliers and customers make it a prime candidate for product stewardship.

Regardless of where it currently fits on the Sustainable Value Framework, however, it is critical that SC Johnson uses Greenlist as a stepping stone to additional innovations.

### **3. What opportunities exist to expand Greenlist?**

#### *Teaching Strategy*

To evaluate this question, it will be necessary to return to the Sustainable Value Framework. In doing so, ask the question, what are the best options for growth? What does it take for product stewardship to become clean technology? How can pollution prevention become product stewardship? And finally, how does Greenlist impact the Sustainability Vision of the company?

Ultimately, the point of this discussion is to cause students to start considering whether and how Greenlist could address the unmet needs of individuals at the Base of the Pyramid. While having this conversation, many points made earlier will become relevant. For example, does sharing Greenlist serve to expand its use? By prompting students to recall the initial conversation, the instructor will be able to coach them on how to develop and implement a sustainability vision once they are managers.

#### *Analysis*

Clearly, several opportunities exist for expanding Greenlist:

- Licensing Greenlist to other companies
- Embedding Greenlist in the company's product development process
- Applying Greenlist to a lifecycle management program

The implementation of these options differs significantly. Moreover, students should acknowledge that the options are not mutually exclusive and that the company can pursue several strategic alternatives (including many that are not listed here).

Licensing Greenlist is a compelling option for the company to consider. Doing so will likely have a positive external impact. Notably, licensing Greenlist may be an opportunity for the company to expand its stakeholder engagement efforts. Consequently, finding the "right" partner will be of critical importance for SC Johnson. This option, however, will confine Greenlist to being used primarily as a tool for product

stewardship. Indeed, by licensing the process, consultants would not be able to modify Greenlist. Therefore, the primary objective of licensing the process would be to multiply the footprint reduction of products across multiple firms and industries.

Another possible expansion of Greenlist is to embed it in the company's product development process. The company has already taken steps to incorporate Greenlist in the annual planning process, with the goal of increasing a product's score. It is unclear, however, if the company has established a comprehensive process to ensure that all new products meet "Designed for the Environment" criteria. A core component of embedding Greenlist is the requirement that SC Johnson overcome critical organizational challenges; specifically, involvement of cross-functional stakeholders beyond the RD&E department (especially those in the marketing organization).

Expanding the scope of Greenlist, to focus not just on product inputs but the entire lifecycle, is another way to ensure that the process has a healthy future. As a consumer packaged-goods company, SC Johnson manufactures and sells a high volume of consumable products. Thus, SC Johnson products likely contribute to landfill waste. At present, the company does not use biodegradable plastics in its packaging, nor does it have an established take-back program to recycle empty packaging. Thus, many end-of-life issues are apparent. In the case of biodegradable plastics, Greenlist may be relevant. Indeed, Greenlist likely would be an important component of a comprehensive lifecycle management program.

While the aforementioned options are important, none of them addresses SC Johnson's sustainability vision. While SC Johnson has undertaken a number of projects to better understand how to market and sell products at the Base of the Pyramid, it is unclear what SC Johnson is doing to ensure that the development and manufacture of products also moves toward this vision. One modification that SC Johnson could make is to include local sourcing as a factor that influences the final Greenlist score or rating of a raw material. Because many countries do not have the extensive regulations that the U.S. government does, it may be appropriate to share Greenlist with the governments of developing nations. The instructor should challenge students to think creatively about possible opportunities for Greenlist at the base of the economic pyramid.