

Johnson and Johnson green business

Business



Final Individual Research Paper * “ Johnson & Johnson Company* ” Table of Contents COMPANY DETAILS: 1. 1 Introduction: Johnson & Johnson (NYSE: JNJ) is a global American pharmaceutical, medical devices and consumer packaged goods manufacturer founded in 1886. Johnson & Johnson is one among the Fortune 500. The corporation’s headquarters is located in New Brunswick, New Jersey, United States. The corporation includes 250 decentralized companies with operations in over 57 countries. Its products are sold in over 175 markets. Johnson & Johnson's brands include numerous household names of medications and first aid supplies.

Among its well-known consumer products are the Band-Aid Brand line of bandages, Tylenol medications, Johnson's baby products, Neutrogena skin and beauty products, Clean & Clear facial wash and Acuvue contact lenses {text: bibliography-mark} . The company believes that it is responsible to the communities in which its employees live and work and to the world community as well. As a large, multinational organization, Johnson & Johnson's environmental footprint is complex and far-reaching. The company strives to take action in all its facilities to minimize this footprint.

Johnson & Johnson has long been committed to energy conservation and improving the health of the planet {text: bibliography-mark} . J has not always been vocal about its socially and environmentally responsible efforts, even it has gotten attention for its sustainability strategies, including being #3 on Newsweek magazine’s Green Rankings List of green companies {text: bibliography-mark} . On a scale of 1 to 100, AstraZeneca and Johnson & Johnson lead the first-ever review of the pharmaceutical sectors to rate above 70 in a recent survey of sustainability practices by Climate Counts.

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Climate count evaluates firms' commitments in four areas: Whether they have measured their carbon footprint If they reduced their impact on global warming If they have supported or blocked climate legislation or policy To what level they have publicly disclosed their climate actions Johnson & Johnson scored highly in all sectors except for measuring its own carbon footprint, an area in which it scored 12 out of 22 {text: bibliography-mark} .

Some interesting facts about J: It's the second largest producer of solar panels in the U. S. it's the largest corporate user of hybrid vehicles, and it gets 30% of its energy from renewable sources. It's also done a lot to reduce its water footprint, reduce PVC content in products, sell waste as raw materials, and use recycled paper in product packaging (Gonzalez, 2009). 1.

2 Mission Johnson & Johnson does not have any mission statement. For more than 60 years, document known as " Our Credo" has guided in fulfilling responsibilities to customers, employees, communities and the stockholders {text: bibliography-mark} . Johnson & Johnson's " Our Credo" is attached in Appendix- B. The company continues to stand by that credo for 118, 700 employees at its facilities in the United States and in 54 countries around the world. It states, " We are responsible to our employees, the men and women who work with us throughout the world. Everyone must be considered as an individual. We must respect their dignity and recognize their merit. They must have a sense of security in their jobs. Compensation must be fair and adequate, and working conditions clean, orderly and safe. Employees must feel free to make suggestions and complaints {text: bibliography-mark} .

The philosophy at Johnson & Johnson is that " All accidents and injuries are preventable. An accident is the end result of a unique chain of events and conditions. The role of all Johnson & Johnson employees is to foresee these

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acts and intercept them before they occur {text: bibliography-mark} . At Johnson & Johnson, continuous improvement is the basis for ongoing operations. As per Joseph Van Houten, worldwide director of Planning, Process Design and Delivery, " Johnson & Johnson is never satisfied with maintaining the status quo.

Each employee has a responsibility to identify, and has possibility to eliminate hazards. In areas where they cannot be eliminated, employees are expected to be aware of hazards and safeguard themselves and others around them". As at many companies with stellar safety programs, Johnson & Johnson management believes safety is everyone's responsibility. Employees are expected to be concerned about their own safety and that of fellow employees, families, customers, contractors, visitors and the communities in which Johnson & Johnson operates. Johnson & Johnson's vision is: bringing science to the art of healthy living. " The safety tenets embodied in the credo have been translated into a safety vision for the corporation that commits Johnson & Johnson to being the world leader in health and safety by creating an injury-free workplace {text: bibliography-mark} . 1. 3 Employee-related activities Johnson & Johnson has a wealth of programs and activities to support a diverse, inclusive culture which acts as an essential key to business success. Affinity groups are voluntary, employee-driven groups that typically focus on a shared interest.

These groups provide support and networking opportunities such as mentoring, community outreach, career development and cultural awareness activities. Johnson & Johnson companies offer formal or informal mentoring programs to expand opportunities and support development of a diverse

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workforce. A number of affinity groups offer programs that match up new members of the work community with experienced leaders who serve as mentors. Johnson & Johnson Diversity University is a dynamic online resource designed to help employees understand and value differences and the benefits of working collaboratively to meet business goals.

The Office of Diversity & Inclusion was established to foster recognition of unique backgrounds, talents and abilities as an important competitive advantage within Johnson & Johnson companies. This helps develop strategies to achieve the global diversity vision, helps operating companies share and leverage their best diversity practices, and reports to the Board of Directors and the Executive Committee on diversity within the companies

{text: bibliography-mark} . 1. 4 Products:

Johnson & Johnson offer products and information targeting baby care, skin and hair care, oral care, nutritionals, women's health, pain relief, wound care & topical, vision care and Over-the-Counter Medicines. Baby products include Baby Powder, Baby Oil, Baby Cream, Baby Lotion, Baby Shampoo, Baby Hair Oil, and Baby Soap {text: bibliography-mark} . Skin Care products include Clean and Clear Face wash, Johnson Buds, Neutrogena, Aveeno and Ambi Skincare. Oral Health Care products include Listerine, Listerine Whitening, Reach, Efferdent, and Rembrandt. Nutritionals include Splenda,

Viactiv, Benecol, Lactacid and Sun Crystals. Women's Health products include Stayfree, Carefree, K-Y, Monistat, e. p. t and O. B. Wound Care * & Tropical * products include Band Aid, Savlon, Johnson Plast, Bengay, Caladryl, Neosporin, Cortaid, Tucks Hemorrhoidal Ointment, Daktarin, and Purell.

Vision Care products are Visine and Acuvue Brand Contact Lenses. Over-the-Counter Medicines include Tylenol, Sudafed, Mylanta, Zyrtec and Zyrtec-D12-Hour, Motrin, Imodium, Pepcid, Nicorette, Benadryl, Roloids, and Dolormin {text: bibliography-mark} . The figure 1 in Appendix-A shows some of the different products of Johnson & Johnson. J&J's Strategies in Reducing Environmental *Footprint: Johnson & Johnson has high standards for operating divisions in the area of environmental responsibility- striving to reduce its environmental impact. The figure 1 gives an idea on the investments made in lowering its Carbon Energy Efficiency. Highlights of Johnson & Johnson green features include: Using renewable, efficient, and clean sources of energy. Reducing Green house gases from manufacturing units Reducing water use on a daily basis. Implementing a forward-looking building design and using natural materials. Purchasing green products/packaging, from cleaning supplies to computers. Reducing Carbon footprint - Implementing a robust recycling program. - Making tools available to help employees implement green practices at work and at home {text: bibliography-mark} .

2. 1 Green Power: Johnson & Johnson (J&J), a long-time green energy purchaser, has surpassed the 400 million kWh per year mark for its annual renewable energy credit (REC) purchase. The total purchase size of about 435 million kWh per year makes the healthcare products provide the nation's eighth largest purchaser, according to the EPA's Green Power Partnership program.

The purchase of various RECs from wind and biomass facilities represents about 38% of the company's U. S. electricity use {text: bibliography-mark} . Johnson & Johnson has won numerous environmental awards over the past

15 years, including the Green Power Partner of the Year in 2003, 2005, 2006, 2007 and 2009. Among its environmental initiatives is its goal to reduce greenhouse gas emissions to 7% below 1990 levels by 2010. The company's renewable energy portfolio also includes direct purchases of bundled green energy from low-impact hydro and wind power.

In addition, the company has now installed 4.1 megawatts (MW) of solar photovoltaic installations at its U. S. facilities. Lastly, the company's unique 3 MW onsite landfill gas project in Mountain View, California became fully operational in 2007. Under a 15-year gas purchase agreement with the City of Mountain View, ALZA Pharmaceuticals, a J&J subsidiary, uses the landfill methane gas to power three research and development buildings in the area adjacent to the landfill site {text: bibliography-mark} .

2.2 Heat and Power from Landfill Gas:

To address volatile, escalating energy prices and concerns about climate change, many large energy consumers including Johnson & Johnson are looking for stable, nonpolluting sources of energy. Besides solar and wind power, landfill gas (LFG) is also an economically viable renewable resource but is often overlooked.

2.2.1 Johnson & Johnson's LFG Project: Johnson & Johnson committed to reducing its GHG emissions by 7 percent below its 1990 levels by 2010. Each of the company's business units has an emissions target whose progress is tracked annually {text: bibliography-mark} .

ALZA pharmaceuticals, a division of J&J, needed to reduce its GHG emissions by 21.5 million pounds per year or risk failing to meet their target. ALZA's research and development facilities in California are adjacent to the

Shoreline Landfill. The figure 2 in Appendix A shows the layout of ALZA. The LFG produced in the Shoreline Landfill by decaying waste was captured and flared in accordance with EPA regulations for large landfills. ALZA and the city of Mountain View signed a 15-year contract for the sale of the gas, which ALZA uses to power three 970-kilowatt generators at each of its research and development buildings in the area.

Electricity from the generators powers the buildings, and the heat captured from the exhaust is used to provide hot water {text: bibliography-mark} . 2.

2. 2 The System: ALZA takes possession of the gas before the existing flare and processes it on-site at the landfill using a standard moisture elimination system. Three 60-horsepower blowers maintain the gas at a pressure of 6 pounds-per-square-inch (psi) as it passes through a chiller. The temperature of the gas at the inlet is 70°F, and when it is exposed to the colder temperatures in the chiller, the moisture in the gas condenses and falls out of the gas as droplets.

The system removes 90 percent of the moisture in the gas and is capable of processing 1, 300 standard cubic feet of gas per minute. Although the landfill generates gas continuously throughout the year, ALZA's electricity needs vary, and sometimes during the winter months the system generates more electricity than the buildings need. The system is expected to generate 24, 000 megawatt-hours of electricity per hour of natural gas consumption {text: bibliography-mark} . 2. 3 Solar Energy: A Solar photovoltaic (PV) system provides the clean, reliable, renewable energy. Johnson & Johnson has installed more than 4. MW of solar photovoltaic generation at ten locations in US. According to WRI as of May 2008, J&J is the second largest user of on-site <https://assignbuster.com/johnson-johnson-green-business/>

solar energy in the United States {text: bibliography-mark} . 2. 3. 1Energy and Atmosphere in J&J PRD, San Diego, California Johnson & Johnson Pharmaceutical Research and Development (J&J PRD) facility in San Diego, California achieved Leadership in Energy and Environmental Design (LEED) and won several awards for their energy and environmental performance. The solar photovoltaic (PV) system provides the clean, renewable energy at J&J PRD as shown in Appendix- Figure 3.

J&J PRD achieved a 2. 2 megawatt from co-generation system so far. J&J PRD roof mounted DC solar PV system which generated a 243 Kilowatt (KW) offsetting 10 percent of the annual electricity consumption in addition to its 90 percent offset from the co-generation system. This shows that J&J PRD has completely offset the building's net annual energy consumption and making the facility carbon neutral. This Solar PV system is expected to generate annual energy savings of approximately \$500, 000 depending on the electric rates.

J&J PRD solar energy generates power equivalent to power consumed by 80 homes {text: bibliography-mark} . 2. 4 Green House Gas Reductions: In Johnson & Johnson since 1990, various company projects have focused on energy efficiency improvements for lighting, facility building envelopes, HVAC, compressed air, office equipment, fuel sources, and heat recovery. From 1990 to 2000, \$12. 5M has been saved through these projects and 107, 000 metric tons of CO₂ have been prevented. Johnson & Johnson's GHG reduction efforts began with an internal goal adopted in 2000.

Each operating company is responsible for meeting GHG reduction goals of 4 percent by 2005 and 7 percent by 2010. Many reductions were identified through Johnson & Johnson's Enhanced Best Practices (EBP), which include 245 energy-saving opportunities for affiliates to consider {text: bibliography-mark} . Johnson & Johnson also partners with organizations aiming to set the standard for GHG management such as EPA's ENERGY STAR®, Green Power Partnership, and Performance Track; World Resources Institute (WRI); World Wildlife Fund; and the Carbon Disclosure Project.

The company has received numerous energy and environmental awards including EPA's Green Power Partner of the Year, The California Governor's Award for Sustainable Practices, New Jersey Clean Energy Business Leader of the Year, and The Climate Group Low Carbon Leader {text: bibliography-mark} . 2. 4. 1 J&J's way of approach to GHG Management: Johnson & Johnson's Inventory Management Plan (IMP) has been integrated into its internal GHG Protocol. Using the IMP has given the company's internal protocol much more structure and clarity, making it easier to explain to those employees new to GHG management.

Johnson & Johnson has various processes in place to track the progress of its goal. The company's Energy Tracking System (ETS) is solely dedicated to tracking energy and emissions goals. Through this system, affiliates report energy usage, cost, and projects with any applicable savings. The ETS utilizes the latest emissions factors from WRI and EPA, and the system adjusts when new factors are published {text: bibliography-mark} . The largest single component responsible for the emissions reduction is the purchase of renewable energy certificates (RECs) for wind power.

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The emission reductions due to the RECs purchases in 2004 accounted for 170, 000 metric tons of CO2 equivalent, offsetting 29 percent of the company's emissions from electricity use and 19 percent of the total corporate emissions in that year. The continued implementation of Johnson & Johnson's energy efficiency best practices and new facility design criteria have also been important contributing factors to its emission reductions {text: bibliography-mark} .

2. 4. 2 Energy and Atmosphere in Janssen

*H*eadquarters Janssen is a division of Ortho-McNeil-Janssen

Pharmaceuticals Inc. which is a wholly owned subsidiary of Johnson & Johnson. Janssen is driven by dedication to product innovation, customer focus, and organizational excellence. The Janssen Headquarters in Titusville site has been able to reduce energy use by 11% and reduce its carbon footprint by 5, 019 metric tons annually; (over 75% reduction) through rigorous building commissioning and maintenance, installation of a 500 kilowatt rooftop solar photovoltaic system as shown in figure 4 in Appendix-A, and the purchase of green power and renewable energy credits (REC).

This is the equivalent of planting approximately 1, 500 acres of trees or removing almost 1, 000 cars from the roadways {text: bibliography-mark} . Johnson & Johnson generates 24 percent of its corporate electricity demand from renewal energy sources. Janssen has offset its CO2 emissions by installing the solar system on its Titusville facility {text: bibliography-mark} .

2. 5 Energy Efficiency: Electricity Johnson & Johnson World Headquarters

building was originally built with an all electric heating and cooling system and limited operating flexibility.

The ENERGY STAR project which began in 2002 after an intensive energy audit and facility condition audit yielded an initial energy performance score of 52. The facility management team put in place a long-term strategic capital improvement plan to upgrade the building's infrastructure with the most technically advanced and energy-efficient equipment available. In addition to installing energy-efficient equipment, the new design enabled facility operators the ability to optimize the indoor environment to match the needs of the occupants {text: bibliography-mark} .

A number of projects were completed, including direct digital control (DDC) upgrades to both air handling equipment and variable air volume (VAV) boxes. Central utility upgrades included converting electric boilers to high efficiency natural gas. The chiller plant was upgraded from a constant flow system to a primary/secondary system with high efficiency centrifugal chillers controlled by variable speed drives (VSD). The cooling tower was upgraded; and a condenser water reset program was installed and controlled by variable frequency drives (VFDs).

A 232 KW photovoltaic elevated tracking system was installed on the upper level of the parking deck. Additionally, high efficiency motors and VFDs were installed on all major air handling equipment and the hot water reheat and chilled water pumps. Solar window film, high efficiency electrical transformers, and general office lighting occupancy sensors were also installed. All of the 24/7 air conditioning loads supplied by the central chiller plant were evaluated and replaced with smaller dedicated HVAC systems enabling the chiller plant runtime to be reduced by 5, 000 hours per year.

The operations and maintenance team replaced 300, 175 watt metal halide lamps in the parking deck operating 24 hours a day with 85 watt Phillips QL induction lamps. The cumulative results of these projects enabled the reduction of the building's overall energy consumption by 25 percent, yielding an improved energy performance score of 85 and qualifying for the ENERGY STAR for superior energy performance {text: bibliography-mark} . Johnson & Johnson's new lab in La Jolla beats California's energy efficiency standards by 18%.

Efficient technologies installed include window glazing and shades, variable speed drives and lights that are all under 60 watts. A 2. 2-megawatt cogeneration system supplies 95% of electricity as well as heating and cooling. The figure 5 in Appendix-A shows the Cogeneration placement in La Jolla. The new lab met Leadership in Energy and Environmental Design (LEED) Silver standards. Johnson & Johnson was the recipient of a 2005 Flex Your Power Energy Efficiency Award {text: bibliography-mark} . This building itself achieves annual savings of \$536, 000 on its energy bill, compared to the amount a standard laboratory would expect to pay.

According to a model used to estimate energy performance of new buildings employed by the local utility, San Diego Gas and Electric (SDG&E), a standard building would have used \$1, 432, 000 per year, which is 37 percent more than the J&J building. Based upon its exemplary energy performance, the building owners are awarded \$143, 000 for their inventiveness from SDG&E {text: bibliography-mark} . This building resulted in an impressive list of energy efficiency and water conservation features resulted in an annual savings of more than a half million dollars.

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This translates into: Enough electricity to power 680 homes Enough natural gas to heat 950 homes Reduced power plant emissions of 4.8 tons of nitrogen oxides per year, 2.1 tons of sulfur oxides per year, and 4,318 tons of carbon dioxide per year.

2.5. 1 Building Envelope: The Lab building in La Jolla, California is constructed of steel framing and curtain wall. A white reflective cap sheet was installed on the roof, which both reduces the overall cooling load for facility and extends roof life because of the reduced roof temperature {text: bibliography-mark} .

2.6 Water Efficiency:

Diminishing water supplies and decreasing water quality are pressing an environmental challenge, which is looked as a more acute problem at Johnson & Johnson. J&J have been reducing water use for many years. It achieved a 16 percent absolute reduction in water use from 2000- 2005, at a time when sales increased by 56 percent. To continue to identify and maximize water conservation, J&J set a Healthy Planet 2010 goal for a further 10 percent absolute reduction in water use from 2005- 2010 {text: bibliography-mark} . PRI provides multi-function support services for government and private facilities.

Services include base operations, maintenance, building management, operations and maintenance of equipment, and maintenance of building management systems {text: bibliography-mark} . The figure 7 of Appendix-A shows the dropped level of water usage in J&J. Johnson & Johnson implemented a number of water conservation technologies at PRI. These include: Recovering condensate from cooling coils is used as make-up water for the cooling towers. Even though this measure had a 15-year payback, J&J

felt that implementing this measure was consistent with their goal of environmental stewardship.

Using reclaimed water for landscape irrigation and other uses: Using reclaimed water (which is available through a separate municipal water distribution system in the vicinity of PRI) for landscape irrigation and for providing makeup water to the cooling towers gives J&J a twofold benefit. First, the reclaimed water costs about 10 percent less than regular water. Second, making a commitment to use it may give J&J some beneficial considerations if drought conditions ever necessitate serious curtailment of water use in the future. Based in Titusville, New Jersey, Johnson & Johnson employs cooling condensate recycling that saves approximately 40,000 gallons of water per year. This eliminates the need for storm water discharge of the condensate and reduces chemical treatment needs for the cooling towers. In 2006, the site converted to 100% waterless urinals, which yielded a 12% reduction in water use (700,000 gallons per year). Johnson & Johnson's La Jolla Lab facility is also water efficient, reducing water use by 11 million gallons annually. 2.7 Waste Reduction: * Johnson & Johnson believes that eliminating or reducing waste will not only help the environment but also reduce the associated costs and risks/liabilities from transportation, treatment and disposal. Johnson & Johnson has set a goal to reduce its hazardous and non-hazardous waste by 10 percent against its 2005 baseline levels. So far, J&J's operating companies have achieved a 10 percent reduction in non-hazardous waste, largely through increased recycling and reuse of their waste and some innovative composting projects.

Similarly, increased recycling and reuse of waste have allowed them to achieve a four percent reduction in hazardous waste since 2005 {text: bibliography-mark} . 2. 7. 1 At Johnson & Johnson's Division in Titusville, New Jersey: Initiatives to improve recycling compliance, combined with the elimination 70 percent of cafeteria disposables, have lead to a 29 percent reduction of non-hazardous solid waste which is 106, 745kg per year. An innovative program to recycle all used carpet began in 2003 and 34, 000 kg of carpet has been recycled till today {text: bibliography-mark} . . 8

Pharmaceuticals in the Environment: Although the vast majority of pharmaceutical and other compounds found in water systems arise from normal patient and consumer use, Johnson & Johnson operating companies are taking steps to evaluate and minimize or eliminate these compounds from their wastewater. Periodic wastewater monitoring has been used to determine potential toxicity to aquatic organisms, to conduct risk assessments, and to develop safe levels for Active pharmaceutical Ingredients (APIs) {text: bibliography-mark} .

Another way pharmaceutical compounds can reach the environment is through consumer disposal of unused or expired medicines. Johnson & Johnson supports the U. S. White House Office of National Drug Control Policy for the Proper Disposal of Prescription Pharmaceuticals. This policy suggests a combination of take-back programs when they are available, trash disposal for most medicines, and flushing for some specific pharmaceuticals, such as narcotics {text: bibliography-mark} . For Example: Johnson & Johnson is also participating in an educational effort, called SMARTxT Disposal, being led by phRMA, the U. S.

Fish & Wildlife Service and the American Pharmacists Association to inform consumers about proper disposal of unused or expired medicines. 2. 9 Indoor Environmental Quality: Like most Johnson & Johnson's buildings that reach an exemplary level of energy efficiency, the PRI facility features a high efficient interior lighting system in its lab division in La Jolla, California. This building's efficiency lies on two reasons. Lighting energy use is huge. Lighting is the single largest energy end use in most commercial buildings, accounting for anywhere in between 25 and 50 percent of overall energy use.

Through a combination of good design and efficient technology like using T5 lamps and electronic ballasts will result in load reduction of 0.30 to 0.50 watts per square foot. Lighting efficiency leads to downstream savings. The ample load reductions that result from efficient lighting lead to reduced cooling loads as well. As a result of reduced cooling and airflow requirements, a series of "downstream" savings are generated, including smaller ductwork, piping, air-handling units, and chillers.

All of these down-stream efficiency gains translate into reduced operating cost, as well as construction cost savings for the smaller systems. The interior lighting system at the PRI facility is designed around high-quality fluorescent sources that are applied to balance efficiency with visual comfort. Other features of the lighting system include occupancy sensors throughout the building and the use of radioactive exit signs that glow without a wired power source {text: bibliography-mark} .

Looking at Johnson & Johnson's division in Titusville, New Jersey, an innovative program to reduce air contamination inside the building was implemented that utilizes ultraviolet lights in all air handlers. This system ensures the cleanest air supply possible, while eliminating the need for chemicals to purify air handler condensate. The site has also implemented low environmental impact housekeeping procedures since 2003, including compliance with Green seal cleaning product standards {text: bibliography-mark} . *2. 10 Carbon Footprint:*

Johnson & Johnson has established a CO2 Reduction Capital Funding Process at the Group Finance level in 2004. The company targeted at \$40 million per year for its energy and GHG reduction projects. Each J&J affiliated divisions apply for funding relief for these projects. The company completed 31 projects by the end of 2007. As of year-end 2008, 51 projects were completed and the company saved 90, 044 tons of CO2 annually. J&J budgeted \$99 million for the projects and expects an average 16. 3 percent rate of return {text: bibliography-mark} .

Johnson & Johnson's headquarters located in New Jersey is located near the train station with intent to reduce the carbon footprint. The major source for Johnson & Johnson's carbon emissions is their fleets of roughly 36, 000 vehicles worldwide. With the goal to improve fuel efficiency per mile by over 30% they have adapted their vehicle buying habits. It now boasts 2, 100 hybrid vehicles in their fleet by March, 2008. Despite these measures, the company has not yet seen an overall improvement in distance per distance driven {text: bibliography-mark} .

The figure 6 of Appendix-A shows the investments made in lower carbon energy efficiency. *2. 11 Packaging*: Johnson & Johnson primarily in the health care products. Since virtually all its products require some type of packaging for protection and preservation, Johnson & Johnson has found significant benefits by reducing packaging materials {text: bibliography-mark} . It began developing its waste reduction program in 1988. Since then, the company has reduced its packaging by 2, 750 tons per year, including a reduction in its use of paper by 1, 600 tons, plastic by 1, 000 tons, metal by 100 tons, and other materials by over 50 tons.

Over the first 2 ? years of the program, these reductions saved Johnson & Johnson an estimated \$2. 8 million in material costs alone {text: bibliography-mark} . So far J&J achieved 93 percent of packaging and 83 percent of office paper to contain more than 30 percent PCR or fiber from certified forests {text: bibliography-mark} . The company began its program by comprehensively reviewing its product packaging, looking for ways to cut back on the amount of materials it purchased, as well as the amount of waste associated with the manufacture and use of these products.

One measure Johnson & Johnson adopted was to reduce the weight of paper used to package one of its gauze products. Millions of these particular products are sold every year and the company realized that even a small change would make a big difference. The company reduced from 30-pound paper to 28-pound paper, Johnson & Johnson faced dramatic results: a reduction in waste of 115 tons of paper, saving \$450, 000 annually {text: bibliography-mark} . 2. 11. 1 Polyvinyl Chloride (PVC) Packaging:

Polyvinyl chloride (PVC) has long been used in packaging for drugs, medical devices and personal care products because of its desirable physical characteristics for protecting product quality, including impermeability to moisture, gas and flavor. But Johnson & Johnson operating companies also understand concerns about the ability to dispose of PVC in an environmentally sound manner and the difficulties with recycling PVC. Its consumer franchise had a goal for 100 percent removal of PVC in primary packaging as well as secondary and tertiary packaging throughout the company.

So far J&J has eliminated 84 percent of secondary and tertiary packaging across the company {text: bibliography-mark} . 2. 11. 2 J&J Initiatives: Johnson & Johnson also has initiated more complex waste prevention initiatives. As one example, the company eliminated an aluminum pouch that surrounded a plastic layer used to contain Prolene medical sutures. This new procedure was implemented without causing any loss of sterility {text: bibliography-mark} . Band Aid brand adhesives bandages were originally packages in the metal “ tin box. By converting 50 percent of the total packaging to recycled paperboard, i. e. , 35-percent post-consumer, the company significantly reduced the quantity of packaging material required {text: bibliography-mark} . Acuvue contact lenses were previously packaged in polypropylene blisters and polypropylene storage boxes. To reduce polypropylene usage and waste, J&J completely redesigned the blister holding the lenses and their fluid to permit opposing blisters to nest.

This change reduced the amount of polypropylene generated as waste during the manufacturing process and the size of the packaging required for <https://assignbuster.com/johnson-johnson-green-business/>

the lenses {text: bibliography-mark} Stayfree feminine hygiene product was previously packaged in a low-density polyethylene (LDPE) bag topped with a cotton drawstring and a “ cuff” to carry the drawstring. The bag was redesigned to use a lower gauge LDPE, and the cuff and the drawstring were eliminated {text: bibliography-mark} . 2. 11. 3 Waste Reduced:

Prolene: 16, 000 pounds of very high grade aluminum foil reduced annually, a 52 percent reduction {text: bibliography-mark} Band Aid brand adhesives bandages: 1. 6 million pounds of metal packaging are saved annually {text: bibliography-mark} Acuvue: Blisters – 264, 000 pounds of polypropylene reduced annually, a 33 percent reduction {text: bibliography-mark}

Stayfree: 440, 000 pounds of LDPE and cotton string reduced annually, a 24 percent reduction {text: bibliography-mark} 2. 11. 4 Annual Savings:

Packaging redesigns for Prolene, Band Aid, Acuvue and Stayfree save Johnson & Johnson over \$3. million annually {text: bibliography-mark} . The annual cost savings associated with reduced packaging for each product are indicated below: 2. 12 Usage of Chemicals*, *Ingredients/ Materials: Johnson & Johnson maintains a list of regulated chemicals. In addition, the company works to anticipate chemicals that are not currently regulated but may be regulated in the future. The corporation has created an “ emerging issues process”, headed by an environmental toxicologist who is part of the worldwide corporate Environmental Health and Safety group and has the responsibility to evaluate new reports on chemicals.

From this review process, the company has created a “ Watch List” of chemicals that have been identified as being of concern by non-government organizations (NGOs) {text: bibliography-mark} . *2. 12. 1 Design tools for <https://assignbuster.com/johnson-johnson-green-business/>

evaluating chemicals of concern and designing greener products.* chemicals file Johnson & Johnson has developed several tools to assist product designers in eliminating chemicals and materials of concern. The first tool is a “ Design for Environment” software tool. Designers can input a chemical and see whether it is heavily or lightly regulated. There is a color-coded scheme which indicates the regulatory level.

Red indicates the chemical is banned by a government agency somewhere in the world; black means highly regulated or on the “ Watch List”; grey indicates the chemical is less regulated; yellow indicates minimal regulation; and, green indicates the chemical is not regulated. The goal is to evaluate the product lifecycle and to identify and reduce impacts from raw material selection, use and disposal {text: bibliography-mark} . The consumer segment of Johnson & Johnson convened an Ingredients Issue Task Force that has developed a rating system for greener materials.

This group has reviewed every ingredient in Johnson & Johnson’s consumer products and has used resources such as the US EPA’s PBT profiler and other tools to identify chemical hazards {text: bibliography-mark} . 2. 13

Recycling: Johnson & Johnson has a goal to have 90 percent of office paper and 75 percent of paper-based packaging containing more than 30 percent post-consumer recycled (PCR) content or containing fiber from certified forests by the end of 2010 {text: bibliography-mark} . Johnson & Johnson believes that all its employees have an impact on the sustainable results.

It has undertaken measures to best utilize the every product in their daily business activities. J&J has increased recycling by 25 percent. J&J has

achieved it with the following steps: Encourages employees to recycle material using two side copying feature Using a reusable cups for beverages Encouraging staff members who purge old files to re-use folders again Recycling paper clips, binder clips, envelopes, cardboards, newspaper, magazines and other similar items. These items are collected from the recycle bins right next to the employee desks and re-used.

Recycles computers, carpets, furniture etc {text: bibliography-mark} 2. 14 Maintenance of Scoreboard: In 2009, the corporation has rolled out a scorecard for green products. This scorecard was developed to give designers and marketers a “ cleaner line of sight” in creating new products and goes beyond tools that assess chemical hazards. A product receives points along five dimensions. Seven points are needed to be identified as a “ greener” product. The dimensions include: materials/ingredients, energy, waste, water, and packaging.

This process includes a high level life cycle assessment to identify the areas of greatest environmental impact {text: bibliography-mark} . *2. 15 Climate Savers: Elements *of Fulfillment Strategies Johnson & Johnson identifies and extreme weather event that disrupts business as the greatest climate related risk the firm faces. Each major operation has a business continuity strategy in place and each business segment manufacture its products in more than one location {text: bibliography-mark} . Johnson & Johnson is tracking and publicizing its CO2 reduction goal worldwide to every level of management.

The goal is also being included in the company's annual environmental report {text: bibliography-mark} . Johnson & Johnson has joined the following external initiatives: The Climate Group (UK); The Climate Registry; US EPA Green Power Partnership; WWF's Climate Savers; WRI's Green Power market Development Group; CDP's Supply Chain Leadership Collaboration; and US climate Action Partnership {text: bibliography-mark} The company covering buildings, equipment, management practices, maintenance practices, and operational practices developed a comprehensive set of energy efficiency best practices.

Sixty-seven percent of the best practices have been completed worldwide. J&J is participating in the LEED (Leadership in Energy and Environmental Design) certification program for existing buildings with its world headquarters building serving as a pilot project. A task force has also been developed to create guidelines that will allow the company to obtain LEED certification for all new facilities. On-site renewable generation: Installation of four solar systems for a total of 1193 kW at California, New Jersey and Pennsylvania facilities.

International on-site generation includes a solar hot water system at J&J Brazil providing 20, 240 kWh/yr. of hot water and a solar hot water system at Janssen-Cilag, Portugal providing 8400 kWh/yr. of hot water. Purchasing of Renewable Energy: All Texas operations: 15 percent wind power, 10. 6 Million kWh/year. Cordis, Netherlands: 10 percent wind power, 1. 1 Million kWh/year. Centocor, Netherlands: 100 percent wind power, 12 Million kWh/year. An annual energy week is conducted worldwide to improve employee awareness. The theme last year was " You Have the Power to Save <https://assignbuster.com/johnson-johnson-green-business/>

Energy for a Brighter Future. Activities to increase awareness include conferences in different regions and an active energy Web site, which includes a renewable site and graphics depicting CO₂ reduction levels {text: bibliography-mark} . Johnson & Johnson conduct environmental campaigns every year and every facility created a five-year education plan to educate employees about climate change, sustainable forestry etc {text: bibliography-mark} .

2. 16 Johnson & Johnson's Green Chemistry Initiatives

Johnson & Johnson's pharmaceutical segment participates in the Pharmaceutical Green Chemistry Roundtable and is investing in green chemistry approaches.

Because of the high costs of drug development, an investment in a green chemistry approach generally does not occur until a new drug has been approved. Johnson & Johnson entered the US EPA's Presidential Green Chemistry Challenge Award Program in 2008 for its work to scale up a pharmaceutical ingredient called Darunavir, a new protease inhibitor. The goal of the project was to reduce health, safety and environmental impacts in manufacturing and to reduce costs.

This approach resulted in reduced solvent usage, hydrogen gas formation was eliminated, and methylene chloride was replaced with a more benign solvent. This increased the yield of the drug by 40% and reduced manufacturing costs by 81%. The company eliminated 96 tons of methylene chloride, reduced hydrogen gas by 4800 cubic meters and reduced raw materials hazardous waste by 46 tons {text: bibliography-mark} .

Green Suggestions and Recommendations: I believe Johnson & Johnson needs to

step up instead of waiting for the clients to take the further lead on sustainability.

The company should always make wise material choices and to make sure its best utilizing the environmentally friendly materials before it undertakes any new project by posing some questions like: Is the project designed to minimize waste? Can it be smaller, lighter, or made from fewer materials? Does it use renewable resources? Is reuse practical and encouraged? Are the products and packaging refillable, recyclable, or repairable? Is it made with post-consumer recycled or reclaimed materials? How much? Are the materials available in a less toxic form? Can it be made with less toxic materials?

Are materials available from a socially and environmentally responsible company? Is it made locally? There are some small gestures which are worth doing to create a sustainable environment. The daily used printing ink must be environmentally friendly: It must reduce emissions, create less toxic waste, use a renewable resource, be easily de-inked, produce less hazardous sludge, and be more biodegradable than conventional ink. Design decisions like reducing the number of colors used to print a job is better on the environment as well as saves the company's budget.

Recycled content is just one of the ways defined to make a good paper. When choosing papers, company should look beyond recycled content and consider recyclability, raw materials, and how the paper is bleached and manufactured. Packing and shipping are also important to think about. Instead of simply accepting the suggested size for a printed piece, company

should consider what size will result in the least waste on press. Instead of specking on an easy-to-find, standard material that happens to release VOCs (volatile organic compounds), progressive material choices must be made as part of the initial presentation.

Johnson & Johnson should start conducting some recycling programs and should let its consumers know about it through advertisements. The recycle programs are designed in such a way that consumers are encouraged to buy more and more environmental friendly products like plastics that are easily recyclable, boxes or products that are packaged in paper materials certified by the Forest Stewardship Council (FSC) or made from post-consumer waste. This recycling program should make the consumers to return the empty packages and receive discounts or free products in return.

Conclusion: All modern buildings are constructed under a number of particularly stringent environmental constraints. These buildings use much less energy and are easy to maintain. The building's success depended on a combination of J design philosophy which is reflected in the company's "New Facilities Design Criteria", careful modeling of building systems to envision how each works on its own and what its impact is on the others, and a steadfast vision of the need to produce a robust structure that will function well for many decades. Hardheaded cost benefits methods were applied to every system in the buildings.

Most often focused on the importance of reliability and smooth operation over the long term. For example: Both of the two large chillers in New Jersey and La Jolla, California had VSDs installed to facilitate maintenance and

provide flexibility with controls, though cost/benefit analysis did not support this decision. A condensate recycling system was installed in spite of showing a 15-year payback because J wants to be a good corporate citizen. Using reclaimed water provided cost savings, improved environmental performance, and also reduces the chances of future water crisis.

One hundred percent completion of best practices does not guarantee Johnson & Johnson with a cost effective and energy efficient design. Firstly, it is important to setup ambitious goals to provide a compass for an organization. Johnson & Johnson Healthy planet 2010 goal that all operating companies have a plan to improve their product and process environmental profiles and eliminate high priority chemicals is a useful way to encourage improvements and track progress in a highly decentralized organization.

Secondly, green design tools are important in implementing these goals. Johnson & Johnson has developed a number of valuable tools to help in designing greener products including a design for environment tool and a rating system for greener ingredients. Thirdly, it is necessary to maintain a scoreboard to measure greener products in an additional means of clarifying and implementing these board goals. Johnson & Johnson has developed a scoreboard for greener products with 5 dimensions: materials/ingredients, energy, waste, water, and packaging.

Fourthly, participation is a valuable opportunity for information exchange. The company's active participation in Product Sustainability Roundtable, a cross sector initiative, has been a valuable way to share information on improving product sustainability. Bibliography Appendix -A Figure 1: {draw:

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