**TITLE: ENVIRONMENTAL MANAGEMENT SYSTEM IMPLEMENTATION FOR WEPRINT**

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**1.0 INTRODUCTION**

This report aims to provide a roadmap for WePrint to establish an Environmental Management System (EMS) to address significant environmental aspects identified in the Initial Environmental Assessment. The scope of this report includes setting SMART environmental objectives, developing an action plan, implementing a measurement and monitoring plan, and establishing a reporting and communication plan. It is important to note that the limitations of this report may stem from the availability of data on environmental performance and the effectiveness of proposed strategies. Significant environmental aspects identified in Assignment 1 include;

1. Paper consumption
2. Ink consumption
3. Energy use
4. Fuel consumption
5. Packaging materials.

**2.0 ENVIRONMENTAL OBJECTIVES**

Environmental objectives are the specific objectives that an organization sets to address and enhance its environmental performance. Environmental objectives are essential for the promotion of sustainability, the reduction of environmental impact, and the integration of operations into sustainable practices (Popoola, 2013).

Setting environmental objectives will allow WePrint to focus its efforts on the implementation of strategies and actions that support its overall environmental objectives.

1. **Strategic Objective**

Ajagbe, et al., (2016) assert that strategy plays a unique role in organizational performance by helping the organization shift from a reactive to a proactive state, which makes it possible to initiate and execute plans that support strategic objective. Organizational strategies foster a greater sense of commitment among members of the organization to attain the objectives that support organizational performance.

Therefore, by the end of the year, WePrint will reduce paper consumption by 20% to address the significant environmental aspect of deforestation and waste generation.

1. **Tactical Objective**

In this context, the tactical objective is to balance customer demand and supply capacity in order to prevent under- and overcapacity. This involves strategically planning to ensure that the company can meet customer demand while also maximizing efficiency and profitability (Shurrab, 2019)

Therefore, the tactical objective includes transitioning to eco-friendly ink options for 50% of printing jobs by the end of the year to address environmental concerns related to ink consumption.

1. **Operational Objective**

The operational objective in this context would be to implement renewable energy sources for 30% of electricity consumption by the end of the year in order to decrease greenhouse gas emissions. This objective aligns with the organization's overall goal of reducing its environmental impact and promoting sustainability.

By setting this specific target, WePrint can focus its efforts on finding and implementing renewable energy solutions to meet this objective within the specified timeframe. This operational objective is essential for improving the organization's environmental performance and aligning its operations with sustainable practices (Yakubu, 2023).

1. **Continual Improvement Objective**

WePrint will reduce fuel consumption through optimized transportation routes and vehicle maintenance to lower greenhouse gas emissions and air pollution, aiming for ongoing improvement in environmental performance.

1. **Maintenance Objective**

Increase the use of reusable or recyclable packaging materials by 25% by the end of the year to minimize waste generation, ensuring the ongoing maintenance of sustainable practices in packaging.

**3.0 ACTION PLAN FOR ACHIEVING ENVIRONMENTAL OBJECTIVES**

Table I: Action Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **What will be done** | **Why is this action needed** | **Resources Required** | **Timescale** | **Responsibility** |
| Conduct a review of current paper suppliers to identify eco-friendly options. | To reduce paper consumption and minimize deforestation. | Time, access to supplier information | 1 month  | Procurement Manager |
| Research and test eco-friendly ink options for printing jobs. | To switch to more sustainable ink options and reduce pollution. | Research budget, ink samples | 2 months  | Printing Manager  |
| Invest in renewable energy sources, such as solar panels, for electricity consumption. | To decrease greenhouse gas emissions and promote sustainability. | Budget for renewable energy installation |  6 months  | Facilities Manager  |
| Implement a vehicle maintenance schedule and optimize transportation routes to reduce fuel consumption | To lower greenhouse gas emissions and air pollution from transportation.  | Maintenance resources, route optimization software.  | 3 months  | Logistics Manager  |
| Source reusable or recyclable packaging materials from sustainable suppliers. | To minimize waste generation and promote recycling.  | Supplier information, budget for sustainable packaging.  | 4 months | Packaging Manager  |

**Key Features of the Action Plan**

The action plan for WePrint focuses on specific steps to achieve the environmental objectives set in the previous section. Each action is tailored to address a particular environmental aspect identified in the Initial Environmental Assessment. By conducting a review of suppliers, researching eco-friendly options, investing in renewable energy, optimizing transportation, and sourcing sustainable packaging, WePrint aims to reduce its environmental impact and promote sustainability. Each action has a clear timeline, resource requirements, and designated responsible personnel to ensure accountability and successful implementation.

**4.0 MEASURING AND MONITORING PLAN FOR WEPRINT**

Table II: Measurement and Monitoring Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter to be measured** | **How will it be measured** | **When and how frequently will it be measured** | **Measure of success** |
| Paper consumption per printing job  | Track paper purchases and usage records  | Monthly At the end of each month  | Reduce paper consumption by 20% by the end of the year  |
| Ink consumption per printing job  | Monitor ink purchases and usage records  | Monthly at the end of each month  | Switch to eco-friendly ink options for 50% of printing jobs by the end of the year  |
| Percentage of renewable energy sources  | Review electricity bills and renewable energy source usage  | Quarterly at the end of each quarter  | Implement renewable energy sources for 30% of electricity consumption by the end of the year  |
| Fuel consumption for transportation  | Record fuel purchases and track vehicle mileage  |  Weekly at the end of each week | Reduce fuel consumption through optimized routes and maintenance  |
| Percentage of reusable or recyclable packaging materials used  | Monitor packaging material purchases and usage  | Monthly at the end of each month  | Increase the use of reusable or recyclable packaging materials by 25% by the end of the year |

WePrint can efficiently evaluate and monitor its environmental impact and sustainability initiatives by putting the aforementioned characteristics into practice and continuously monitoring them. WePrint can endeavor to lessen its carbon footprint, save resources, and advance sustainable practices in the printing sector by establishing quantifiable targets and routinely evaluating its progress. WePrint will be able to make more informed decisions, operate more efficiently, and eventually meet its sustainability targets with the aid of its monitoring and measurement plan.

**5.0 TRAINING AND COMMUNICATION PLAN FOR WEPRINT**

Progress towards achieving objectives and key features of the EMS will be reported and communicated as follows:

Table III: Communication Plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Stakeholder** | **What to communicate** | **Who will communicate** | **Mode of communication** | **When and how frequently to communicate** |
| Employees | Environmental objectives and action plan, importance of reducing paper and ink consumption, energy and fuel efficiency measures  | Environmental Manager or Sustainability Officer | Email updates, staff meetings, training sessions  | Monthly updates and quarterly training sessions  |
| Management | Progress towards environmental objectives, key performance indicators, results of measurement and monitoring plan | Environmental Manager  | Quarterly reports, face-to-face meetings | Quarterly updates and annual reports  |
| Suppliers | Request for eco-friendly paper, ink, and packaging materials, importance of sustainable sourcing | Procurement Manager  | Supplier meetings, email communication  | As needed, especially when sourcing new materials | |
| Customers | Sustainable printing options available, benefits of using eco-friendly products  | Marketing Manager  | Website updates, social media posts, customer newsletters  | Ongoing communication through various channels |
| Regulatory Bodies  | Compliance with environmental regulations, progress towards environmental objectives  | Environmental Manager  | Regulatory submissions, compliance reports  | As required by regulations |

Implementing an Environmental Management System (EMS) successfully requires effective training and communication (Kaisu & Torbjo¨rn, 2006). WePrint can make sure that everyone is on the same page and working toward sustainability by outlining the environmental objectives, action plans, and progress towards attaining them to stakeholders like staff, management, suppliers, customers, and regulatory organizations. Various communication channels, training sessions, and regular updates will serve to keep stakeholders informed and involved in the EMS process. WePrint can keep enhancing its environmental performance and help create a more sustainable future by promoting a culture of environmental responsibility and openness (Popoola, 2013).

**CONCLUSION**

The overall objective of the Measurement and Monitoring Plan for WePrint is to track key sustainability and environmental performance metrics on a regular basis. By measuring and analyzing data on paper, ink, renewable energy, fuel, and packaging, WePrint will be able to reduce its environmental impact and enhance its sustainability practices. Specific targets will be set for each parameter of the plan, including:

1. Reduce paper consumption by 20 % by year-end
2. Optimize ink options for 50 % of printing jobs
3. Utilize renewable energy for 30 % of electricity consumption
4. Reduce fuel consumption through optimised routes and maintenance
5. Reduce the use of reusable and recyclable packaging by 25 %

By regularly monitoring and evaluating its sustainability performance, WePrint can make informed decisions to continue to improve its environmental performance.

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