

Proposal
for
Becoming a Green Charity Organization

Submitted to
Environment and Conservation Fund

Pok Oi Hospital Board

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1. Introduction

POK OI Hospital Board (herein after named as POH), with the vision of “To be a charitable organization that strives to provide diversified and quality services, maximizes on available resources, devotes to continuous improvement, and drives for innovative measures”, has been focusing on a great variety of the medical, education and social welfare service with sustainable development in the Hong Kong Community. Our concerted effort has gained wide recognition from the community. We are currently operating 55 service units which include medical / health service / education and social service units.

We devote to serve the community by providing many different social services. In view of the environmental protection, we have also committed ourselves to improving the environment and contributing to sustainable development on our service units. Some of the service units have already implemented green initiatives by applying for different types of funds. Aiming to become a green charity organization, POH is now proposing to the Environment and Conservation Fund (ECF) for an environmental programme for implementing another 93 green projects to continuously pursue our environmental commitment.

2. POH’s Green Commitment

Besides the commitment on the quality of the social services provided, POH is also committed to conserving the environment and promoting environmental awareness, with the ultimate goal to become a green organization. In the past few years, POH has already started some of the environmental programme (e.g. HSBC-Pok Oi Cycle-for-Millions, which aims to promote the sport to the community as well as to encourage the public to support environmental protection and lead a greener lifestyle by cycling.) and Green setup (e.g. Solar panel in the Pok Oi Chan Kai Memorial College, etc). With the support from the ECF funding in the future, POH could formulate a structured environmental plan and carry out more environmental initiatives in the Group. By incorporating environmental initiatives in POH’s governance and operations, POH not only contributes to the sustainable development of the community but also helps promote the environmental awareness to the service users and thus influences the community. We have committed to:

- 1) Identify and minimize impact / carbon emission to the environment
- 2) Set up some of the green representative units in the social services units and education units, respectively
- 3) Cultivate green culture among the community, especially on the green improvement in social services unit.
- 4) Ultimately, become a Green Charity Organization

3. POH’s Green Strategies

POH has formulated the following strategies to effectively implement the environmental initiatives:

- 1) Green Governance and Environmental Management
- 2) Energy and Carbon --- Energy / carbon reduction and renewable energy source
- 3) Waste --- Waste management
- 4) Water --- Water management
- 5) Green purchasing
- 6) Green Education and Promotion
- 7) Use of Electric Vehicles with Zero Emissions

3.1 *Green Strategy 1 – Green Governance and Environmental Management*

With the well developed environmental management in the POH group, we could drive towards sustainability. We understand the importance of detailed planning and programme steering, we intended to form a Steering Committee, which comprises of:

- Chairman of POH
- Chief Executive Officer of POH
- Other core members of POH Board
- Representative from ECF Committee
- External Professional

In general, the Steering Committee will be responsible for

- Formulating environmental strategies and awareness programme
- Developing the sustainable development framework
- Integrating and reconciling social, economical and environmental elements into decision-making processes and corporate operations
- Overseeing the implementation of green initiatives including proposed green projects and other environmental measures
- Monitoring work progress
- Ensuring the green initiatives are completed within budget and resources and meet the expected quality
- Reviewing the performance of the green initiatives
- Compiling and disseminating environmental performance in different channels such as POH's website, annual report, corporate circular, etc

Therefore, the Steering Committee is so important for the raising, monitoring and implementation on the green projects. To facilitate the progress, we will also appoint the senior officers from different service departments of POH as the Environmental Managers. They will assist the Steering Committee in managing and monitoring the projects at the project implementation stage; and will also be responsible for compiling progress reports and related documents to ECF Committee. Therefore, with the well developed environmental management team and green governance, we are confident that the programme would be implemented and monitored under control.

POH understands the importance of the establishment of the Green Governance and Environmental Management System (EMS). Therefore, POH will set up the environmental management system for our headquarters by making reference to the ISO14001 principles. POH will also study the application of ISO14001 certification if applicable.

The following environmental aspects will be considered at the project life-cycle, which will be introduced briefly on the following parts:

- Energy management
- Waste management
- Water management
- Green purchasing

3.2 *Green Strategy 2 – Energy / Carbon Reduction and Renewable Energy Source*

Global warming is one of the hottest terms in the world recently. It is threatening everyone on the globe and leads to extreme weather and may eventually bring detrimental disasters. The lead of global warming is from the excess amount of the greenhouse gases in the atmosphere (the major component is carbon dioxide) which are emitted from various human activities. Hence, the most effective solution to combat global warming is to reduce one's carbon footprint by enhancing energy efficiency and implementing carbon reduction measures.

To better plan for the implementation of energy conservation and carbon reduction measures in long run, POH will select / focus on 5 social service units to identify the total carbon emissions / energy use through conducting comprehensive energy-cum-carbon audits. With this piece of important information on hand, then we could project and estimate the carbon footprint in the whole group of POH. The data of the total energy consumption / carbon emission will then be served as the baseline for comparison after the implementation of environmental measures in following years. In addition, we will also conduct assessment on the reduction of carbon emission as a result of project implemented throughout this program. Therefore, POH will be able to formulate / monitor long term energy conservation and carbon reduction measures even after the completion of this proposed 36 months environmental programme. POH will announce the carbon audit result on the website and try to participate in the Hong Kong Awards for Environmental Excellence (HKAEE) CarbonLESS certificate where appropriate.

Reducing electricity consumption not only helps brings down the carbon footprint of the building operations and improves the regional air quality, but also saves operational cost and eventually improve productivity. Therefore, we have been proactively introducing energy saving measures for our staff in the group, such as POH is proposing to install energy saving equipment and renewable energy equipment at the premises of service units. Having conducted some preliminary study on the applicability and cost-effectiveness of different energy saving and renewable energy equipment, we have identified the following projects for some of our service units:

- Replacing old and energy inefficient lights by energy efficient types: T5 florescent lamp, LED wall lamp, LED exit sign lamp, etc
- Replacing the old and energy inefficient air conditioners by models with energy efficiency labels
- Other energy saving installations: motion sensor, solar film
- Renewable energy equipment including solar panels, wind turbines, solar water heaters, solar lamps, solar panel for irrigation system and mosquito-killing lamps, kinetic-energy bicycle (動能單車), etc

In addition, green roof and vertical greening will also be applied on some of the selected units.

Green roof is a green technology that brings direct and immediate benefits to the community outside POH's service network. Green roof not only lowers the temperature of the premise underneath but also reduce "urban heat island effect" and serve as a landscaping feature for the community nearby. By lowering the temperature of the premise underneath, the use of electricity for the air conditioning could be reduced, especially during the summer. Therefore, the carbon emission could be reduced eventually.

Vertical greening is a wall, either free-standing or part of a building, which is partially or completely covered with vegetation and plants. Vertical greening is found most often in urban environments where the plants reduce overall temperatures of the building. These green walls are particularly suitable for cities, as they allow good use of available vertical surface areas. The green wall could also function for urban agriculture, urban gardening, or for its beauty as art. It is sometimes built indoors to help alleviate sick building syndrome.

More importantly, by setting up the green roof and vertical greening, the service units could organize environmental education and social activities, such as proper maintenance measures and gathering functions, etc. for the promotion of green message to the community and the other charity group.

Therefore, by applying the energy saving policy and measures with the use of renewable energy source, the green roof and vertical greening in the programme, the energy consumption could be reduced significantly.

3.3 *Green Strategy 3 – Waste management*

Besides the reduction of the carbon footprint / energy consumption, the waste reduction measure is also important in the project. The major sources of waste in POH group are wastewater and solid waste. While we will ensure the compliance of legal discharge standard on our service units' discharged wastewater, we will also focus on the handling of solid waste in this proposal, which is a great environmental issue in Hong Kong especially with limited space in landfill. We will formulate waste reduction plan for our service units. We will also establish waste prevention guidelines for staff and service users to reduce waste at source, manage resources in a better way, such as

Paper Saving Measures

- Using electronic copies and avoid printing hard copies as far as possible (including the Board's annual report and papers for presentation to the Board's Committees)
- Using both sides of paper
- Avoid using paper cups
- Reusing paper envelopes, bags, folders, etc.
- Reminding staff and service users "Check and think before print" to avoid unnecessary printing, etc.

Other waste prevention measures can be implemented via better resources management and green procurement processes. Materials (like paper envelop, plastic bag, etc.) are reused as many times as possible.

Besides the control of the waste generated, POH will reinforce waste management measures and encourage staff and service users to participate in waste separation and recycling. In addition to recycling paper, plastics and metals, the service units are encouraged to coordinate and recycle more items such as toner cartridges and batteries.

For those waste which can hardly be avoided, the waste shall be treated and diverted from dumping at landfill as far as possible. In view of the volume of food waste generated in some of our units everyday, we propose to collect and recycle the food waste by using the Food Waste Composter in one of our representative units. The composter serves as a green education model and we can participate in the operation of the composter. The food

waste generated on site can be converted to fertilizer which can then be used on the same site and/or distributed to other service units. POH will coordinate among the service units which need the fertilizer.

3.4 *Green Strategy 4 – Water management*

Water is one of the limited resources in the world. Due to the heavy industrial development in the past few decades, many of the water sources have already been polluted. Therefore, the water is getting more important to human in the future. Similar to the strategy of energy and waste, we have to reduce the use of water by applying the water saving guideline. Other measures such as the rainwater collection system will be applied in some of the selected units.

By recycling the rainwater, we are not only saving the water resource, but also reducing the wastewater discharge. Therefore, we propose to set up the rainwater recycling system in some of our social service units and schools. The rainwater collection tank will be set up with the connection of drainage pipe from the roof of the building. Then the rainwater will be diverted, collected and recycled for secondary process use (e.g. for cleaning and irrigation). There will be filtration system for cleansing the rainwater collected for health and safety reason. The rainwater collection system will be useful in reducing consumption of portable water especially during the raining season in Hong Kong.

Therefore, through better resource management, POH can not only minimize the amount of waste / water generated, but also conserve natural resources and increase productivity. POH has already imposed some resources saving practices. POH will further promote resource conservation concept among staff, students and service users via the demonstration of installations and establishment of internal operation guidelines and education programmes which will be highlighted in the following parts.

3.5 *Green Strategy 5 - Green Purchasing*

POH will take the lead in pursuing green purchasing in order to minimize the environmental impact brought from the supply chain.

Green purchasing guidelines will be established for staff:

- Impose green requirements when sourcing products/services
- Purchase reusable containers and avoid products with excessive packaging
- Purchase durable materials/equipment
- Use recycled products (e.g. recycled paper) as far as possible
- Purchase products and services that are more environmentally friendly (e.g. environmentally friendly cleaning agents/chemicals, water-based paints, etc.

3.6 *Green Strategy 6 – Green Education and Promotion*

The aforementioned green initiatives certainly can help POH to be more “green”. The sustainability of the green initiatives depends on the awareness and sense of responsibility of staff and service users, who will further influence others and eventually the community. The ultimate goal of POH is to develop the sense of responsibility of the community so that green elements become part of our life. Therefore, in this proposal, we are focusing and investing more on the education and promotion programme, no matter for the education or social service units, other peers charity organization, or general public.

For example, the energy saving and renewable energy installations not only reduce energy consumption but also serve as green education to the target users of the service units who could further disseminate the green messages to their family and community. The benefits of the installations are substantial and can reach multiple groups of the community including staff, target service users (e.g. students and their family) as well as general public thru different visits, leaflets, etc.

More specifically, the models of the renewable energy installations (e.g. solar panel) are instrumental to illustrate the merits of renewable energy to the service users (e.g. students and parents) and general public. For instance, students can be motivated to study the status of energy generation in the solar/wind power equipment and the carbon footprint reduced. The study results can be published on notice board such that all the staff and target users would appreciate the benefits brought by the green installations.

By setting up the green roof and vertical greening, the service units can organize environmental education and social activities, such as proper maintenance measures and gathering functions, etc. For the food waste composter, we will also motivate the service user to participate actively in the operation, monitoring or compilation of the beneficial data (e.g. energy saved and waste reduced). The beneficial data can be disseminated to all stakeholders and general public via email circular, notice board, publications and website of POH, etc.

Realizing the magnificent effect of awareness promotion, we are committed in raising environmental consciousness of the community by setting up ourselves as a role model and mobilizing our staff, service users, business partners and finally influencing the general public to take the responsibility to conserve our environment and combat climate change. We are targeting to develop our Tuen Mun Nursing Home and Chan Kai Memorial College as our Green representative units in the social service and education sectors.

In order to reinforce the environmental consciousness and obligations of students, staff, service users and eventually the whole community, we propose to launch a series of activities and programmes:

- Organize a ceremony for launching the implementation of the green projects and for promoting the upcoming projects and activities.
- Promote green living practices and activities; and publicize POH's achievements in improving the environment via the existing platform such as regular activities/seminars, notice board, annual report, publications e.g. homepage, pamphlets, email, etc.
- Incorporate "green" themes in school curriculum (e.g. moral and civic), activities, events, fund-raising programmes, seminars and competitions, etc.
- Organize some signature functions to publicize the achievements of the green projects and promulgate the environmental obligations to all POH's service users, staff and even the general public. Example functions are:
 - Carnivals/exhibitions for promulgating environmental obligations and disseminating the benefits of the green projects
 - Collaborating with other parties to organize talks, workshops, outings and visits, etc., to enhance environmental knowledge and obligations of students, staff and service users

- Waste Reduction Programme (e.g. organizing events for exchanging second-hand books and school uniforms, recycling waste electrical and electronic equipment, etc.)
- Establish green corners where information, news and experiences about environmental conservation are disseminated and shared

In light of the impact of our next generation in sustainable development, education units are the foci of green education. We target to advocate students' care to sustainable development and expect students can promulgate green messages to their family and to the whole community eventually. In addition to the proposed approaches above, we will consider incorporating green elements in daily school duties, curriculum and extra-curricular activities to cultivate green culture in campus. We will also encourage our schools to implement the Student Environmental Protection Ambassador Scheme which aims to enhance student's environmental consciousness and develop their sense of responsibility. Students and teachers will acquire relevant knowledge and skills via organizing and participating in different workshops, seminars and green activities. Some of our schools have obtained various kinds of environmental awards and we will encourage other schools to do better by setting the front runners as role models. For example,

The 80th Anniversary Tang Ying Hei College won the Champion in the Greening School Project Award 2008 / 2009 ---- Horticultural Maintenance from Leisure and Cultural Services Department, while the Chan Kai Memorial College has won the School Honors Awards and Schools Special Awards, the First runner-up of The Hong Kong Green School Award, the Outstanding Environmental Protection Teacher Awards in the year between 1995 to 2000 which is organized by Environmental Campaign Committee.

These front runners can share their experience and ideas in implementing green projects/activities with other service units. We also plan for signature green installations in some of our selected schools, such as the solar energy installation for Chan Kai Memorial College and green roofs for Chan Kwok Wai Primary School. These types of larger scale installations can act as signature demonstration sites within our group for different service units, and we can also open them up for other groups for visit and experience sharing.

In addition to the awards and the environmental measures which are suggested in our units in this proposal, the POH is also supportive on the environmental initiatives carried by the HKSAR Government. In December 2010, one of our schools, Tang Pui King Memorial College(鄧佩瓊紀念中學) participated in a seminar organized by the EPD (Seminar on the demonstration to the LPG Taxi Trade proper repair and maintenance) and also provided the suitable venue for this seminar. Therefore, we do support on different environmental promotion / initiatives, not only collaborate in our own service units and peers, but also collaborate with the Government. We will keep exploring any other opportunity to support the Government project in the future.

We also plan to develop and publish comprehensive environmental education and awareness promotion materials, such as video, handbook, technical manuals, etc. after the execution of our planned environmental activities throughout this programme.

Besides the promotion programme, seminars will be organized for the social services units (e.g. elderly centres, clinics) to raise their awareness in improving energy efficiency

and resources conservation. After the completion of energy-cum-carbon audit in some service units, the findings will be shared among all other service units.

With a wide and effective publicity programme, we anticipate the merits and benefits of these environmental initiatives will be well recognized by the public which also provides a driving force to our counterparts and even the whole society to contribute in improving the environment.

3.7 Green Strategy 7 – Use of Electric Vehicles with Zero Emissions

As a commitment to protecting the environment, POH keeps studying the possibility of using the electric vehicles for the POH Mobile Chinese Medicine Clinics. Although POH are using the diesel vehicles at the moment, POH has been working with the Hong Kong Polytechnic University for the use of the electric vehicle since 2009. When the technology is mature in the near future, POH will use this type of new energy vehicles for new or replacement of POH Mobile Chinese Medicine Clinics by using our own resources.

4. Benefits to the Peers and the Community

POH is serving a large group of stakeholders in the community covering different types of service users ranging from students, youth, elderly to the physically disabled, and patients, etc. We have also employed a large group of staff and have developed our extensive network in the community.

With the senior management officials taking the lead to formulate the environmental policy, implement the green initiatives/measures, and develop education and publicity programmes; it is anticipated that while the service units of POH will obtain the immediate benefits, the whole community in Hong Kong will also take the reciprocal advantage from the devotion of more parties in the society to green initiatives.

We understand there are other charity groups which are also applying the ECF for the environmental improvement in their group of units. Some of them are more focusing on environmental improvement in education units. However, in POH, we would like to focus more on the environmental improvement in social services units, so as to strike the balance between different units / sectors served by different charity groups in the whole community. Therefore, not only the student in HK could enjoy the environmental measures and facilities, but also those elderly people or those people supported by the social services units provided by POH could enjoy and get the eco message with the environmental set up. By the end, it will be beneficial to the whole community by offering a variety of environmental measures in different groups of units from different charity groups.

For example, in our proposed Green representative units in the Group, Tuen Mun Nursing Home is one of the biggest Nursing Home in Hong Kong. It is also one of the representative social service units in the region. Tuen Mun Nursing Home provides a center for the training of the volunteer workers in Pok Oi to support the group. By setting up the green measures in this center, the volunteer workers could be trained up, not only technically, but also with the concept of environmental protection which could be spread out throughout the demonstration in the Nursing home or other activities among the peers. Therefore, we believe the environmental message could be passed by the participation of the volunteer workers and the public / users of the service units. In addition, this will also be served as signature demonstration site within our group for different service units, and we can also open them up for other groups for visit and experience sharing.

In this programme, we have 35 units applying for the ECF, while there are totally 93 projects involved. 68 projects and 25 projects will be conducted in the social service units and education units respectively. So the number of projects involved in the social units is significantly more than those in education units.

We commit to identify the total carbon emission for all of our service units. Through the execution of this environmental programme, we endeavor for a significant reduction of energy consumption / carbon emission. We will announce our carbon data to our peers to serve as a good reference for others to benchmark.

We also plan to develop and publish comprehensive environmental education and awareness promotion materials, such as video, handbook, technical manuals, etc. after the execution of our planned environmental activities throughout this programme. These educational materials will be shared among our service units, other stakeholders (e.g. other charity groups) and also the general public. We strongly believe that the environmental awareness among the whole community will be further enhanced through these educational materials.

To have the better monitoring of the programme, a clear objective and performance indicators are important. POH will update all the information including the green pledge, green policy and governance structure in the website, newspaper, etc. Questionnaires would be placed in those service units for the collection of advice and comments from the users / public regularly. The environmental performance with the progress of the programme and any non-compliance for public scrutiny could be disclosed in the website if possible.

5. Budget Estimation and Action Plan

POH proposes to seek a funding support of HK\$14,556,130 from ECF, of which HK\$1,200,000 is the fee for commissioning an environmental consultant and HK\$1,200,000 is the cost for producing educational materials and organizing education and promotion programmes (see Appendix for the Budget Summary). On top of the funding request from ECF, we will also devote our own resources in other areas so as to maximize the effect of the green programmes, such as but not limited to develop the education and promotion programmes, formulate waste reduction programme, etc.

Many of the green projects proposed are large-scale and complicated. Expertise input is of paramount importance to the successful implementation of the projects. Lacking the relevant expertise, POH proposes to commission a competent environmental consultant to provide expertise services in overseeing all the green projects, providing technical advice, assisting in the selection the cost-effective products/services, assisting in the preparation of tender and contract documents for selecting the best contractors, etc. Hence, POH proposes to seek the funding support of HK\$1,200,000 from ECF for commissioning an environmental consultant to provide consultancy services for the 3-year project period. Proper tendering procedures will be in place to select competent consultant for the service.

35 services units of POH are applying for funding to implement 93 green projects. For the sake of best resource management, we propose that these green projects are implemented by phases within 3 years:

Year 1

- Install energy saving lights and air conditioners
- Install other energy saving features (i.e. motion sensor, solar film)

- Install rainwater recycling systems
- Carry out energy-cum-carbon audit for 5 selected units and the estimation of the carbon footprint for the whole group
- Install food waste composters for the requested units
- Set up the guideline for the waste management, energy and water saving in the group
- Develop educational materials, i.e. video, handbook, technical manuals, etc.
- Develop environmental management system in headquarter

Year 2

- Install green roof for requesting site
- Implement renewable energy projects (solar panels, solar water heaters, wind turbines, solar/wind lamps, etc) for some selected sites
- Install other green projects: meteorology centre, kinetic-energy bicycle, stepping device for generating electricity (踏步感應發電裝置)
- Develop educational materials, i.e. video, handbook, technical manuals, etc.

Year 3

- Install vertical greening for the requesting site
- Implement renewable energy projects (solar panels, solar water heaters, wind turbines, solar/wind lamps, etc) for the remaining selected site
- Conduct assessment on the reduction of carbon emission as a result of project implemented throughout this program
- Develop and publish educational materials, i.e. video, handbook, technical manuals, etc.

Since there are numbers of minor works at schools, the works will be carried out during long vacation such as Christmas, Easter and summer holidays as far as possible in order to reduce the impact to normal school activities. So the above action plan is only tentative and subject to change in order not to affect the daily operation of POH's service units. Tendering and other procedures will be streamlined to achieve better cost effectiveness.

Some of the projects, e.g. green roof and renewable energy projects, will be carried out at some selected units first rather than at all units at one time. In such a way, the experience gained (including preparation of tender documents, selection of contractors and the actual performance of the installed systems) by the units undertaking the projects first can serve as good references for other units.

Project management is essential to ensure timely completion of projects and control budget. POH will form project management teams for individual units to plan, implement and monitor the projects effectively and to communicate with the environmental consultant.

6. Conclusions and the Way Forward

POH is committed to protecting the environment and promoting environmental awareness in the community. Being one of the major social, health-care and educational service providers in Hong Kong, POH will endeavor to promote green lifestyle and act positively to reduce adverse environmental impact to the community.

In our proposed environmental programme, we would like to highlight the following measures,

- Identifying the total carbon emission for all our service units and the corresponding carbon reduction measures, in which the data will be served as a good reference for others to benchmark.

- Setting up the green representative / demonstration unit (especially in social service units), so as to promote the green message and provide a platform for experience sharing, visit from the public and peers.
- Developing and publishing a variety of environmental education and awareness materials which will be shared among the service units, other peers and the public.

Although the proposed green projects are expected to complete within 3 years, this does not mean this is the end of POH's green commitment. After the project period, we will continue to maintain and operate the green installations, to implement our environmental policy and publicity programmes, with a view to continuously contributing to sustainable development and taking a leading role in influencing the community to conserve the environment.

Appendix A

Pok Oi Hospital Board – Becoming a Green Charity Organization

Budget Summary

Green Initiatives		Estimated Budget
1	Green Roof and Vertical Greening <ul style="list-style-type: none"> Green roof for 1 primary school and vertical greening for 1 secondary school 	584,750
2	Energy Efficient Installations – lighting <ul style="list-style-type: none"> Lighting retrofit (T5 and LED) for 3 education units; Lighting retrofit (T5 and LED) for POH headquarters, and other 25 social services units. 	3,483,300
3	Energy Efficient Installations – air conditioning <ul style="list-style-type: none"> Energy efficient room coolers for 2 education units; Energy efficiency room coolers for the POH headquarters, and other 21 social service units. 	1,117,950
4	Energy Efficient Installations – others <ul style="list-style-type: none"> Solar films for POH headquarters; Motion sensors for 2 secondary schools; 1 social service unit. 	14,130
5	Renewable Energy Installations <ul style="list-style-type: none"> Solar water heater for 1 secondary school; Solar panels for 3 secondary schools and 1 social service unit; Solar lamps for 1 secondary schools; 1 primary school and 1 social service unit; Solar panel for supporting other environmental friendly set up e.g. Hydro-farming; ecological pool (生態池) with solar energy for pump, filtering system and irrigation; Greenhouse with solar system, etc; Solar Panel for Irrigation System for 1 secondary school & Solar Mosquito-Killing Lamps for 2 secondary schools, 1 primary school and 1 social service unit; Wind turbines for 1 social service unit, 1 secondary school; Kinetic-energy bicycle for 1 secondary school. 	5,016,000
6	<ul style="list-style-type: none"> Energy-cum-carbon audit & Carbon Footprinting Energy-cum-carbon audit for 5 selected social service 	800,000

Green Initiatives		Estimated Budget
	units and with the estimation of carbon footprint for the whole group initially. Conduct assessment on the reduction of carbon emission as a result of program / project implemented throughout this program.	
7	Waste Reduction <ul style="list-style-type: none"> • Composting machine for 2 elderly centers. 	400,000
8	Water Conservation <ul style="list-style-type: none"> • Rainwater recycling system for 1 secondary school, 1 primary school and 1 social service unit. 	400,000
9	<ul style="list-style-type: none"> • Stepping device for generating electricity for 1 secondary school. 	90,000
10	<ul style="list-style-type: none"> • Development and implantation of EMS in the headquarter 	200,000
11	Green Education <ul style="list-style-type: none"> • Meteorology Centre; • Publicity programme e.g. launching ceremony, annual carnivals / exhibitions, talks, workshops, outings and visits, etc • Education and waste reduction programme, e.g. - producing video, handbook, technical manuals, web pages, environmental-friendly printing of leaflets/brochures, etc 	50,000 680,000 520,000
12	Engaging an environmental consultancy for 3 years.	1,200,000
	Total:	14,556,130