



# *Sharing Session With NGOs*

**TUNG WAH GROUP OF HOSPITALS  
TO MOVE TOWARDS  
A GREEN ORGANIZATION**

24 September 2009



# OUR EARLY EFFORTS IN ENVIRONMENTAL PROTECTION

A





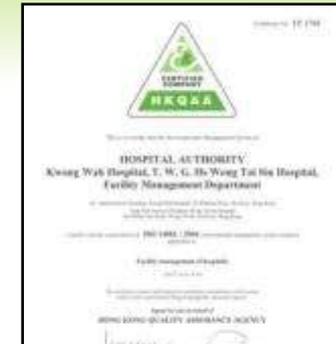
# MEDICAL & HEALTH SERVICES



Green Hospital Awards Gold Awards to KWH and TWGHs WTSH



Photovoltaic panel at KWH



KWH obtained the ISO 14001 EMS Certificate



New heat pump system at KWH



Chinese Medicine dispensaries have installed water scrubbers



# COMMUNITY SERVICES



Qing Yan Furnace



No-flame cooking



Eco-coffins



Ozone laundry facilities



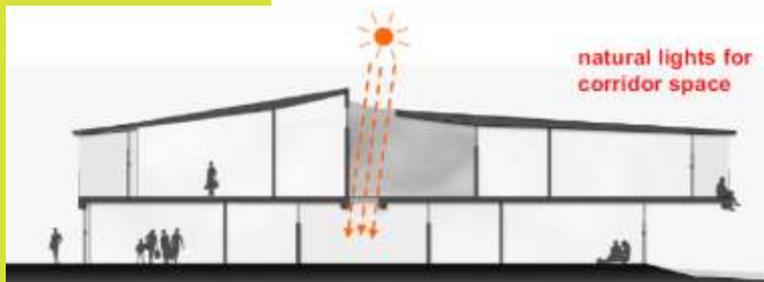
# GREEN BUILDING & SUSTAINABILITY



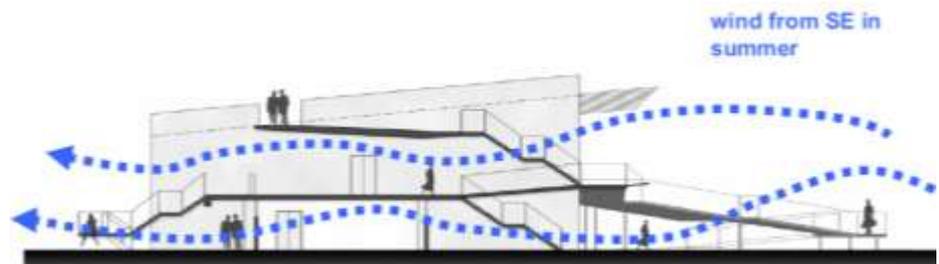
Green features in KWH  
Redevelopment Project



Restoration and adaptive reuse of  
historic buildings, e.g. Coffin Home



natural lights for  
corridor space



wind from SE in  
summer

Sustainability design of TWGHs  
Youth Camp Project



# GREEN PROCUREMENT AND PROPERTY MANAGEMENT

## Green Procurement

- Green specifications for commonly used items such as vehicles, recyclable stationery and papers, lunch boxes



## Property Management

- Quality Water Recognition Scheme
- Collection of waste paper, plastic, metals and rechargeable batteries
- Green Office house rules





# EDUCATION SERVICES



One Person, One Flower Scheme organized by LCSD



TWGHs Mrs. Wu York Yu Memorial College

Championship in the senior group section in an urban design competition



Championship in the junior primary school section and the kindergarten section in the Story-telling Competition on "Healthy Wetlands, Healthy People"



TWGHs Leo Tung-hai LEE Primary School and TWGHs Ko Teck Kin Memorial Kindergarten



# ONE STEP FORWARD



**Consolidation of Previous Green Experience**

TWGHs is committed to pursue a  
**TOTAL ENVIRONMENTAL APPROACH**

in operating its Medical, Education and  
Community Services



# PARTNERSHIP BETWEEN ECF AND TWGHS TO MOVE TOWARDS A GREEN ORGANIZATION





# PROCESS TO BUILD UP THIS GREEN PROJECT

B





# GREEN PROJECT WORKING GROUP



- ③ Green Project Working Group set up at the executive level, comprising representatives of all Divisions/Branches
- ③ Green Managers appointed to promote green initiatives and assist in implementing the Group's green house rules
- ③ A New Green Chapter in Annual Reports and Annual Plans





# PROJECT INCEPTION



Green Tour to visit Lamma Winds



Visit to Organic Farming at Hok Tau Village



Visit to Long Valley Wetland



Green Education & Resource Centre



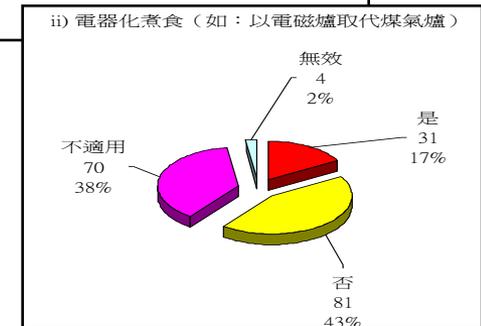
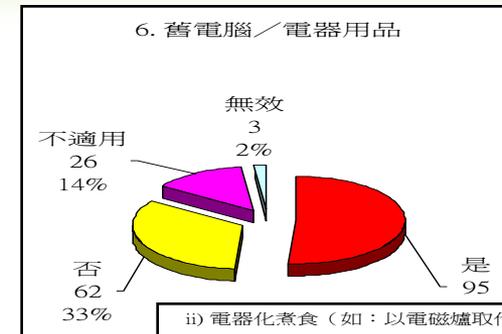
# PROJECT INCEPTION



Environmental Talks



Briefing Session of Environmental Management Survey



Questionnaire Survey on Environmental Management



Meetings with Green Groups and External Environmental Consultancies



# ENVIRONMENTAL STEERING COMMITTEE & ENVIRONMENTAL WORKING GROUP



- ◎ ESC and EWG have been set up in 2008
- ◎ To **steer** the Group towards environmental conservation;
- ◎ To **monitor and review** the Group's environmental performance;
- ◎ To **identify** areas for improvement; and
- ◎ To **formulate** future environmental policies.





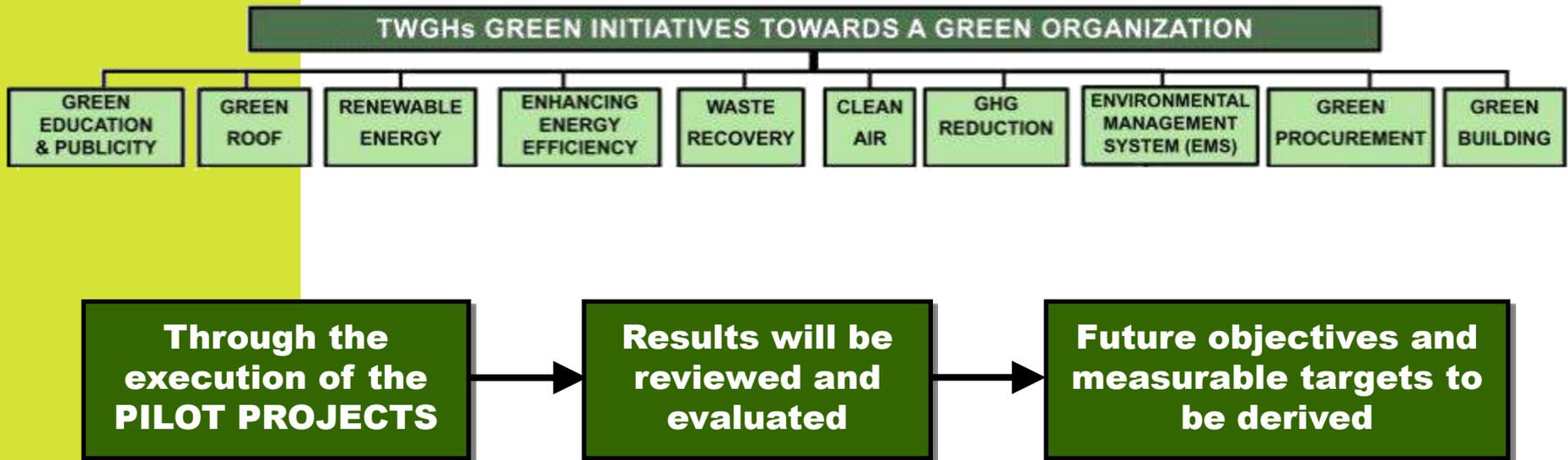
# GREEN STRATEGIES

- ⦿ Green Governance
- ⦿ Green Education
- ⦿ Green Procurement
- ⦿ Go Green on Energy
- ⦿ Conservation of Resources
- ⦿ Pollution Reduction
- ⦿ Green Building





# GREEN INITIATIVES





# PROPOSED GREEN INITIATIVES



Weather Station



ISO 14001  
(TWGHs' resources)

Green Roof and Monitoring & Data Evaluation



Small Composting Machines



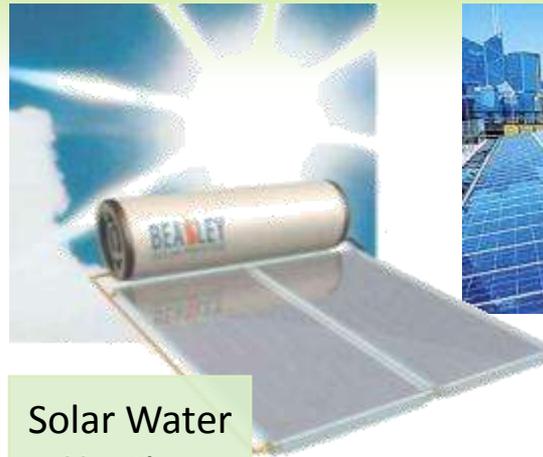
Waste Source Separation



# PROPOSED GREEN INITIATIVES



Small Wind Turbine



Solar Water Heating



Photovoltaic Panels



Energy-efficient Room-Coolers



Motion Sensors / Solar Films



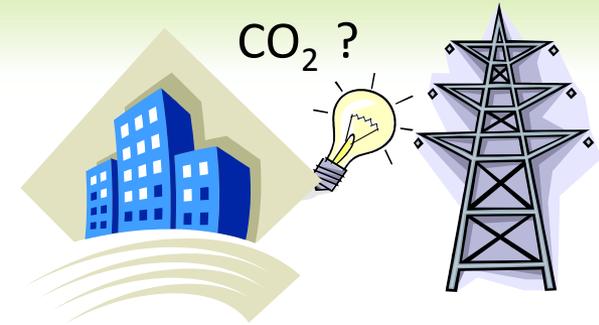
# PROPOSED GREEN INITIATIVES



Temple Smoke Reduction System



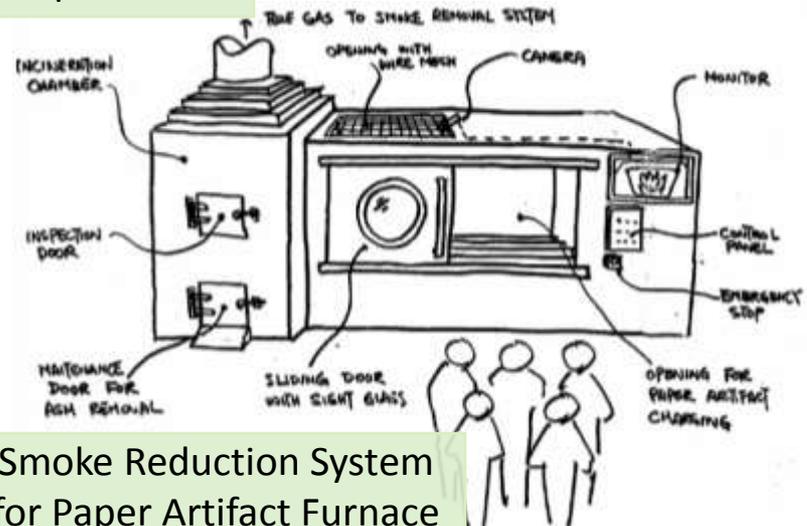
Indoor Air Quality Improvement



Energy-cum-Carbon Audits



Eco-coffin & Eco-incense



Smoke Reduction System for Paper Artifact Furnace

# PROPOSED GREEN INITIATIVES

## ◎ Green Education, Publicity & Communications Programme

### ◎ Green Learning

- Design diversified learning and fun programme
- Inter-school Competition
- e-Green Learning
- Joint-schools Workshops/ Seminars

### ◎ Communication Programme

- Launching Ceremony
- “Greening” the Charity Gala 2009
- Web pages
- Green Chapter





# SELECTION CRITERIA FOR IMPLEMENTATION OF GREEN PILOT PROJECTS

- ① Representation of Building Types
- ② Availability of Space for Projects
- ③ Suitability of Site for Projects
- ④ Accessibility by the Public
- ⑤ Users' Participation
- ⑥ Set a Role Model for Others



Hospitals



Enough space for green roof?



Schools



Social Services Building



Suitability for Solar Films?

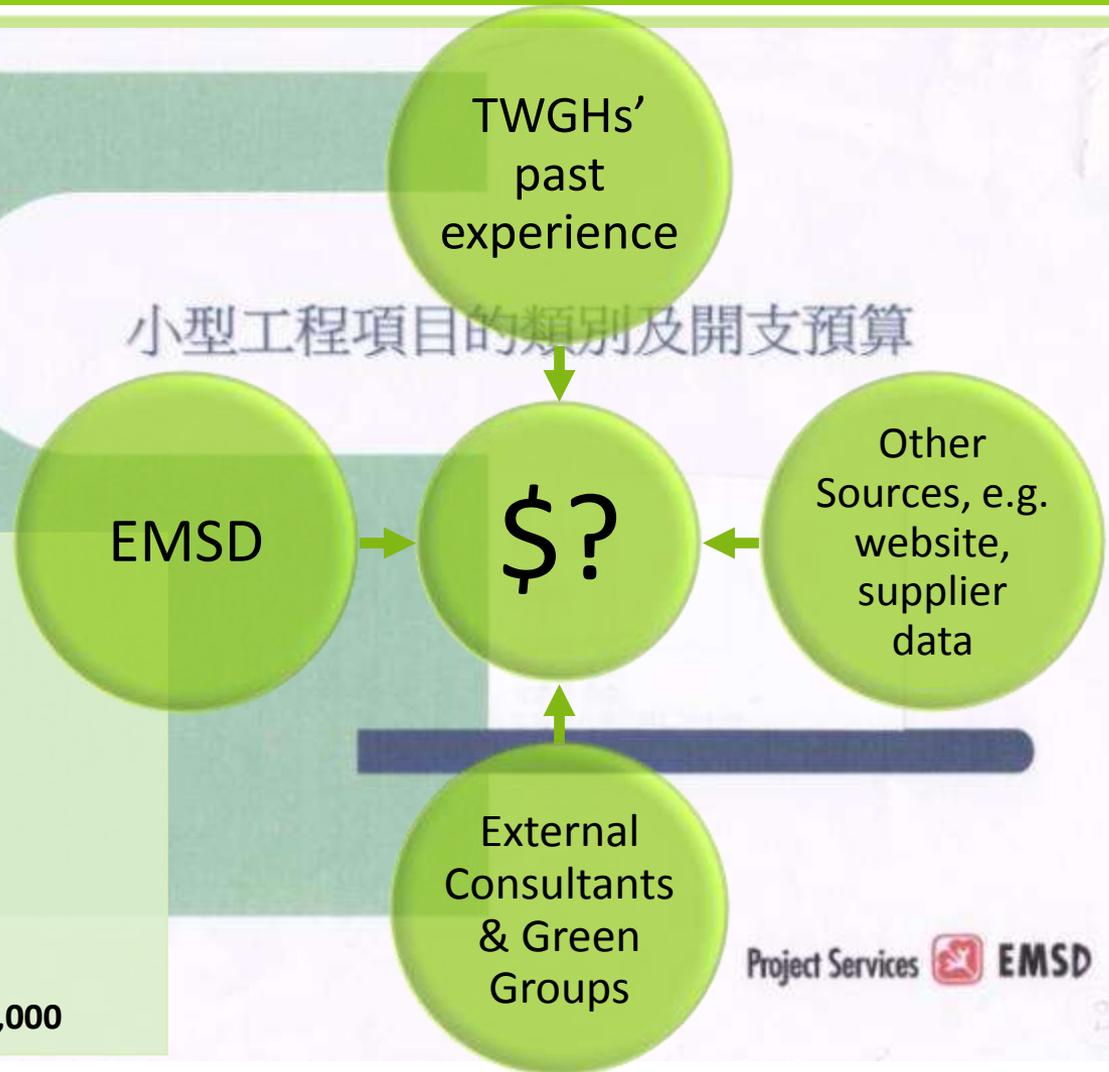


Users' Participation in using solar water heating



Any fence and accessible by students?

# COST ESTIMATION



Example:

PV Panels:

No. of panels = 10

Output power of each panel = 1.5kW

Size of each panel = 1.5m x 0.8m

Capital cost of 1 set = \$180,000

Scope of work:

-PV panels, installation fee, accessories,  
appointment of authorized person

Maintenance cost = \$9,000 per year

⇒ **1 set of PV panels for a school = \$189,000**



# ECF APPLICATION

TWGHs' meetings with SEN and EPD representatives  
(Oct 2007 & Mar to May 2008)



TWGHs' Executive Committee approved the Green Project Proposal  
(Aug 2008)



Submission of Proposal on "TWGHs to Move Towards a Green Organization"  
to ECF (Sep 2008)



Revised Proposal on "TWGHs to Move Towards a Green Organization"  
submitted to ECF (Dec 2008)



ECF Committee issued an In-Principle Approval for a \$19.84M grant to  
TWGHs for a 3-year programme (Jan 2009)



ECF Committee approved TWGHs' funding allocation of \$1.2M for  
engagement of an Environmental Consultant (Apr 2009)



TWGHs appointed the Environmental Consultant for a period of 36 months  
(Jul 2009)



# OUR WISH TO INFLUENCE THE COMMUNITY



- ◎ **MULTIPLYING EFFECT** will be triggered by Tung Wah to provide positive influence to the Community
- ◎ Create platform for Tung Wah's stakeholders to learn and appreciate green living through Pilot Projects:
  - ◎ No. of students over 29,000
  - ◎ No. of staff over 10,000
  - ◎ No. of services recipients/ attendance over 1.7 million
- ◎ Set a role model for other organizations and industries



# PROJECT IMPLEMENTATION

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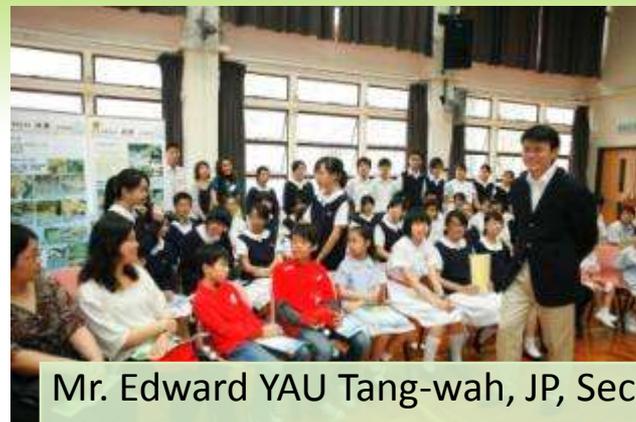




# LAUNCHING CEREMONY FOR TWGHs TO MOVE TOWARDS A GREEN ORGANIZATION 21 MARCH 2009



Stage Performance 「保護濕地齊齊rap」



Mr. Edward YAU Tang-wah, JP, Secretary for the Environment conducted an Interview Session with Students



Launching Ceremony



Group Photo with Mr. Edward YAU Tang-wah, JP, Secretary for the Environment



# GREEN WEB PAGE

故此獲準簽署  
環保協會頒發的20  
08年度綠標證書，成  
為醫院。

署，東華三院屬下五間醫院，包括華醫院、東華醫院、東華醫院及東華醫院。此外，東華醫院、

"Furthermore, the Headquarters on the side of the Group will undergo a comprehensive process of "Turning green", including ISO 14001 accreditation, environmental management system, energy conservation with greenhouse gas reduction, indoor air quality improvement, energy-saving substitutes (such as small energy-efficient lighting, LED wall signs, motion sensors, solar film etc.) and construction of green roof. The Headquarters will also promote the implementation of the green project and coordinate the improvement of environmental performance for all services centers of the Group."



# WHAT'S NEW

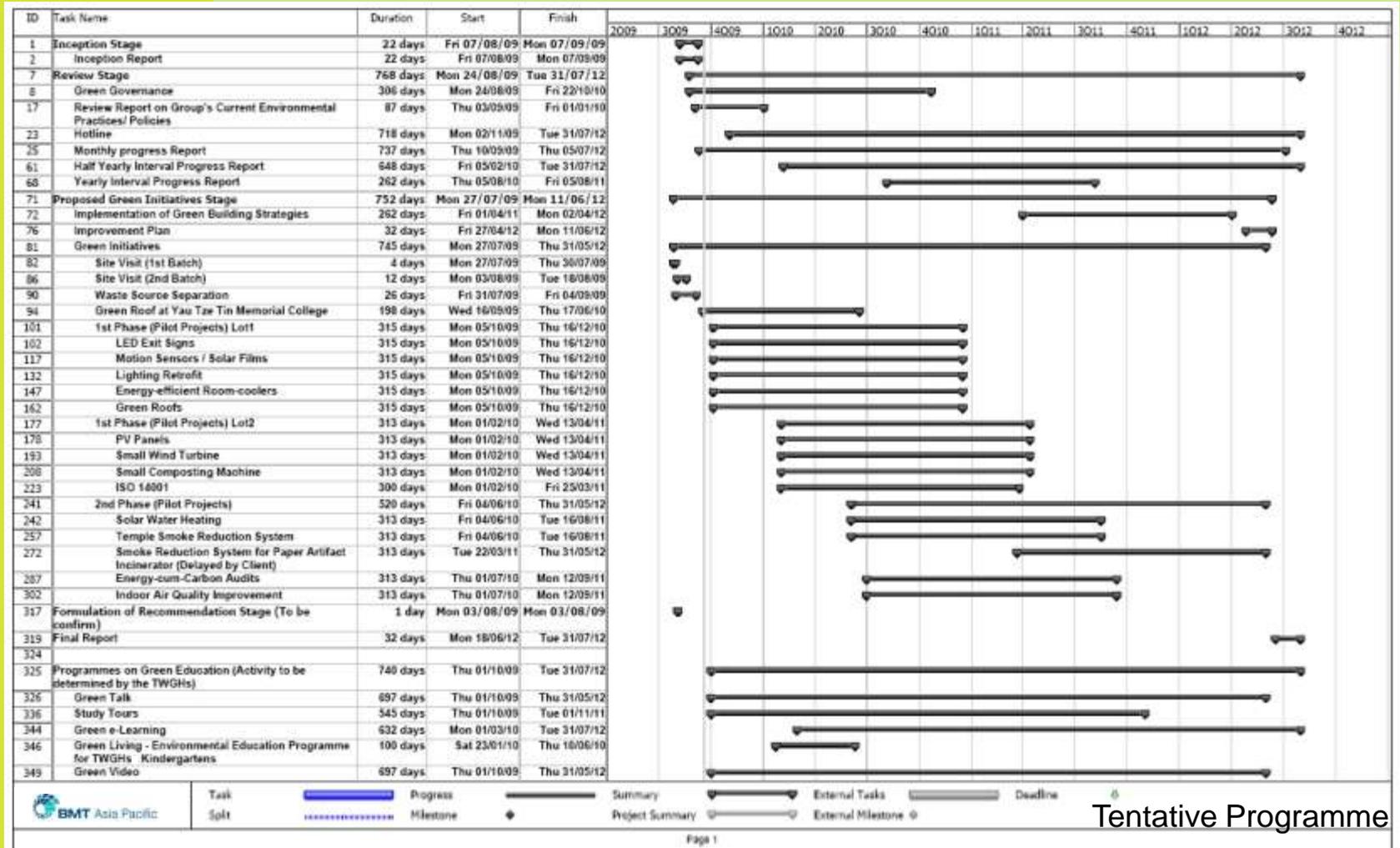


Kick-off Ceremony for TWGHs Little Green Angel – Children Green Education Programme 24 September 2009

Joint Schools Mascot and Slogan Design Competition for Green Living



# MASTER PLAN





# LOOKING FORWARD

- ① Incorporate sustainability principles and measures in operating its medical, education and community services
- ① Continue its efforts in the pursuit of achieving various environmental, social and economic targets to meet the sustainability challenges ahead
- ① Attain a high-quality and sustainable living environment for the community and the future generations





THANK YOU!