

同心展關懷

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香港社會服務聯會頒發

# Safety Summit - Construction Safety Week

建造業安全周 · 安全峰會

Dedicated to Inculcating Safety Culture –  
The Housing Authority's Holistic Approach  
to Works Management System

銳意培育安全文化  
房委會的全方位施工管理體制

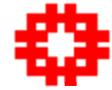
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21 - 05 - 2012





- Vision and policy  
宏觀策略
- Problems and analysis  
問題剖析
- Successful measures  
成功措施
- Initiatives and way forward  
未來路向



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Vision  
理想

## Vision and Mission 理想和工作目標

- To help all families in need gain access to adequate and affordable housing
- 協助有需要的家庭入住合適而能力可以負擔的居所

Mission  
工作目標

- To provide affordable quality housing, management, maintenance and other housing related services in a proactive and caring manner.
- Cost-effective and rational use of public resources
- Competent, dedicated and performance-oriented team.
- 積極進取、體恤關懷，提供優良的管理、妥善的保養維修以及其他有關房屋的服務。
- 確保公屋資源得到合理的運用，符合成本效益。
- 建立能幹、盡責、講求效率的工作隊伍。

- 30+ new works construction sites – building, piling, demolition & civil engineering, with 6000+ site employees under contractors' management  
 現時房委會正進行的新建築工程合約共有三十多個，包括上蓋、地基、拆卸及土木工程等，承建商聘用約六千多名工地人員



- As a public sector client, we take a proactive role to **promote site safety through the supply chain in line with our '4C' core values**

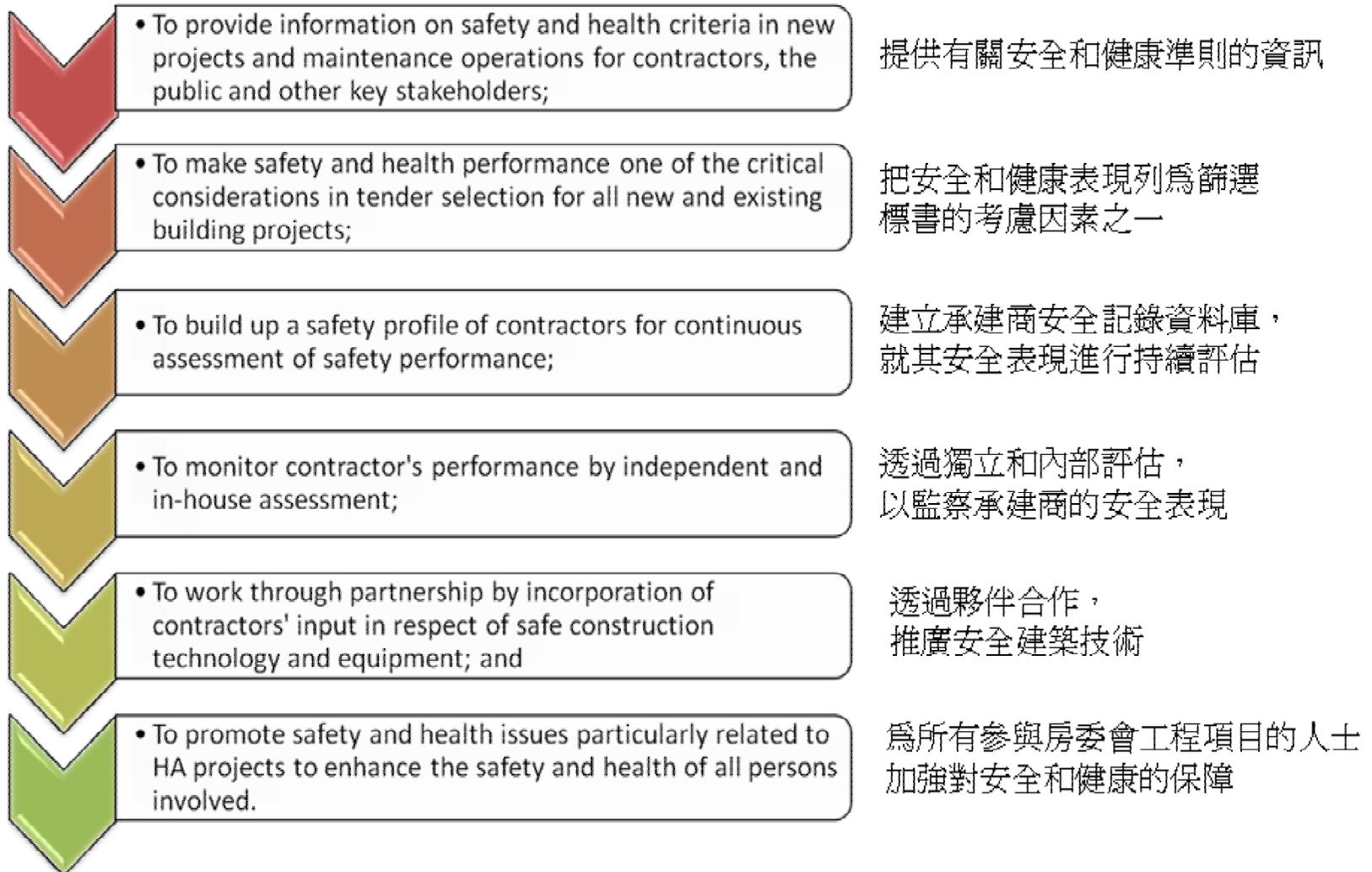
作為公營發展機構，房委會秉承「4C」的基本信念，透過供應鏈的運作，一直長期努力，積極推動工地安全





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## Overarching Safety Policy 總體安全政策





## Three-pronged strategy 三管齊下措施

- 有賞有罰的採購策略和表現監察機制  
Procurement strategy and performance monitoring mechanisms with incentives and sanctions

- 供應鏈管理      - 名冊管理      - 安全承諾和指標      - 表現評核和監察



- 加強合約規定和管理  
Strengthening contract requirements and administration

- 推廣最佳作業模式      - 優化實效措施      - 鞏固工地和安全管理      - 提升安全意識



- 與業界攜手合作，致力研究、培訓和推廣  
Working in partnership with stakeholders on research, training and promotion

- 與業界攜手合作      - 安全策畧和統計      - 安全獎勵和約章      - 安全推廣



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### Uplifting performance 提升表現 精益求精

- Quality 質素
- Safety 安全
- Environment 環境管理

力臻完善  
追求卓越  
Aim for perfection,  
strive for  
excellence

力爭上游  
從容達標  
Strive for  
improvement,  
achieve  
standard at  
ease

發奮達標  
Strive to  
meet  
required  
standard

勉強達標  
Just meet  
required  
standard

力有不逮  
未能達標  
Incompetent,  
fall below  
standard

有教無類  
Educate with no  
discrimination

接受淘汰  
Eliminate from  
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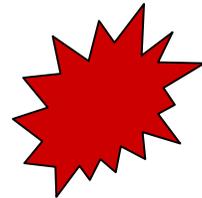


## 2011 : Accident Rate per 1,000 workers

- HA's new works construction sites – 9
- Hong Kong's construction sites – 49.7

## 2011 : Fatalities 死亡意外

- HA's construction sites 房委會新工程 – 0
- Hong Kong's construction sites 香港建造業 – 23



But this induces a lot of work for us in HA !  
這卻帶來大量工作予房委會！

## Our Ideal 我們理想的

"5 – ZERO contractors" 五零 承建商：

- ZERO accident 零 意外
- ZERO incident 零 事故
- ZERO conviction 零 檢控
- ZERO complaint 零 投訴
- ZERO dispute 零 糾紛

# Problems and analysis 問題剖析



Protection of steel bars



Good housekeeping



Poor housekeeping



No safety shoes



Protective cover for bar bending yard



Precast hard paving



Loose objects in metal formwork



Improper lifting container



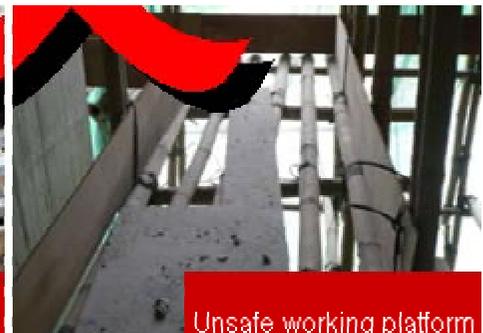
CCTV at lifting zone



Reversing video device



No protection to floor openings



Unsafe working platform



CCTV at tower crane



Full height Lift shaft barrier



Gaps between guard rail



Cables not properly fixed immersed in water



## Safe Working Environment 安全工作環境

- Challenges ahead with vast expansion of construction work volume  
建造工程興旺，工地管理和工人面對更大壓力和挑戰
- Aging and lack of proper maintenance of heavy plant / machinery  
重型機械高齡化及欠缺妥善維修

## Safe Working Habit 安全工作習性

- Aging, new comers and skills mismatch of workforce  
工人高齡化，新入職工人和技能錯配是安全隱患
- Malpractice tends to contaminate across sites with different standards due to volatility of workforce  
工人流動性高，各有不同施工方法，導致不良施工方法影響不同工地
- Slack safety awareness of frontline workers and site management  
前線工人和工地管理人員的安全意識薄弱

## Other Factors 其他因素

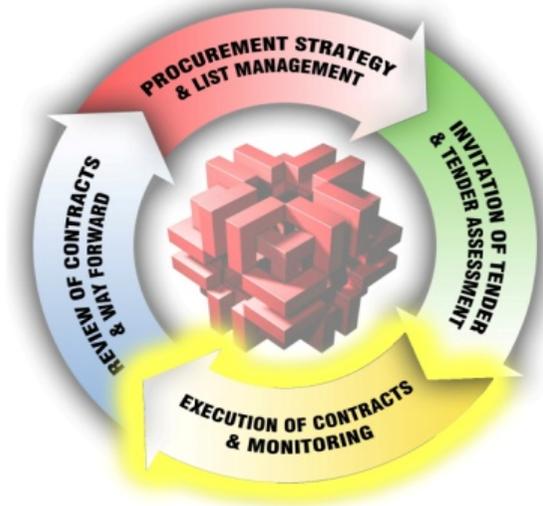
- Risk assessment not thoroughly conducted and related to specific tasks  
風險評估欠周詳，亦未充分考慮實際工作
- Safety measures not strictly observed  
安全措施未有嚴格遵守
- Safety training not systematic and focused  
安全培訓沒有系統和重點



PASS as a performance-based controlling mechanism in the Procurement Cycle **since 1990**

自**1990年**表現評分制成為採購週期裏以表現為基礎的監察工具

- Performance Monitoring  
表現監察
- How to ensure contractors perform?  
如何確保承建商表現達致要求水平
- What gets measured gets done!  
打分數**評核** 達標可落實
- Objective & transparent appraisal  
客觀及透明的評審機制
- Effective training tool  
有效訓練工具
- Clarification of requirements of specifications  
釐清建築規格要求
- Useful benchmarking vehicle  
有效量度表現的指標



Performance Monitoring - compliance with specifications  
表現監察 - 符合建築規格要求

List Management - assess the qualification and standard of contractors

名冊管理 - 評估承建商的資格及水平

Tendering Process - selection of tenderers and tender assessment

投標過程 - 選擇投標者及評審標書

Review - review the effectiveness of the procurement system

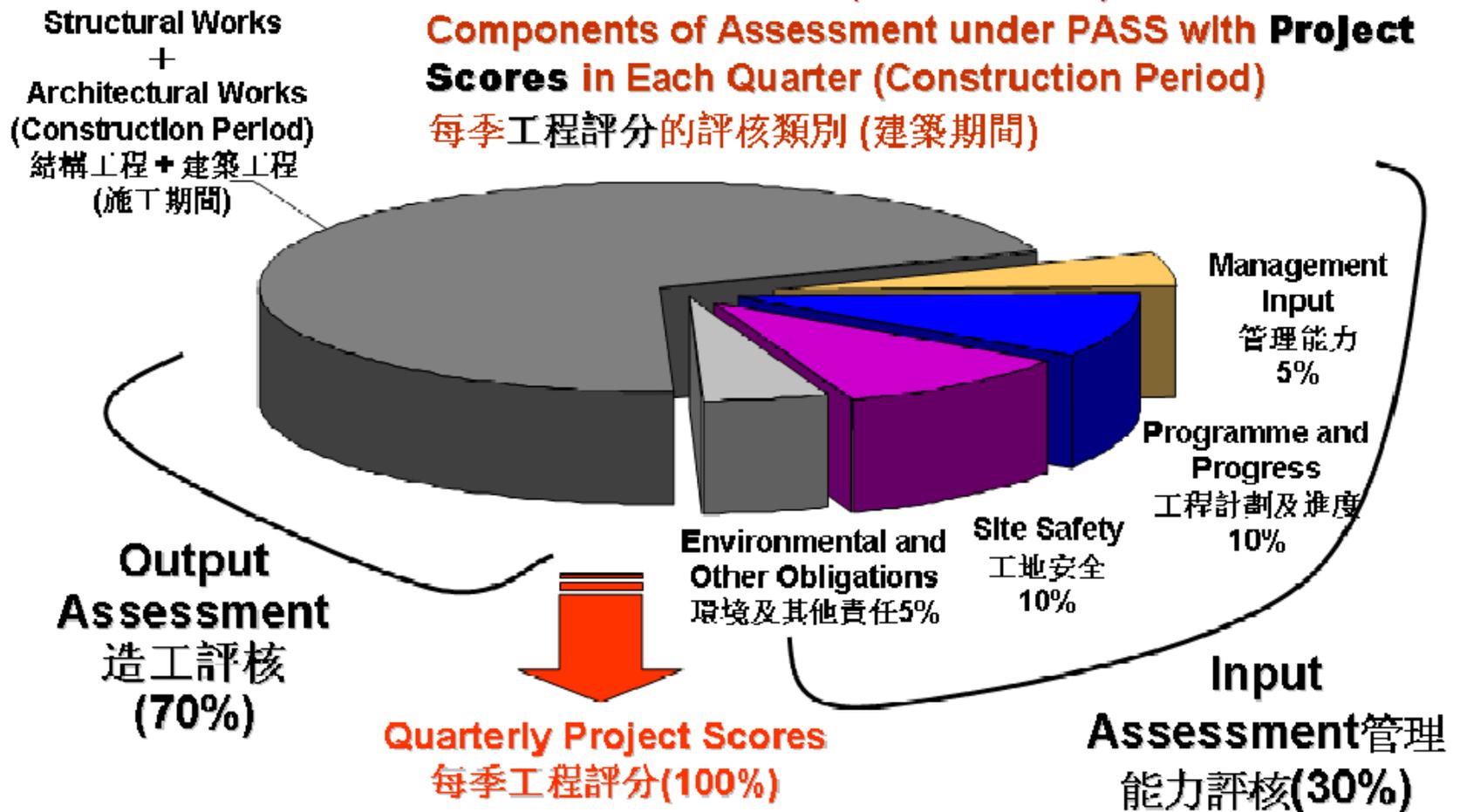
檢討 - 檢討採購系統的成效



### Performance Monitoring (PASS) 承建商表現評分制

## Building PASS ( as an illustrative example)

### 建築工程承建商表現評分制 (示範例子)



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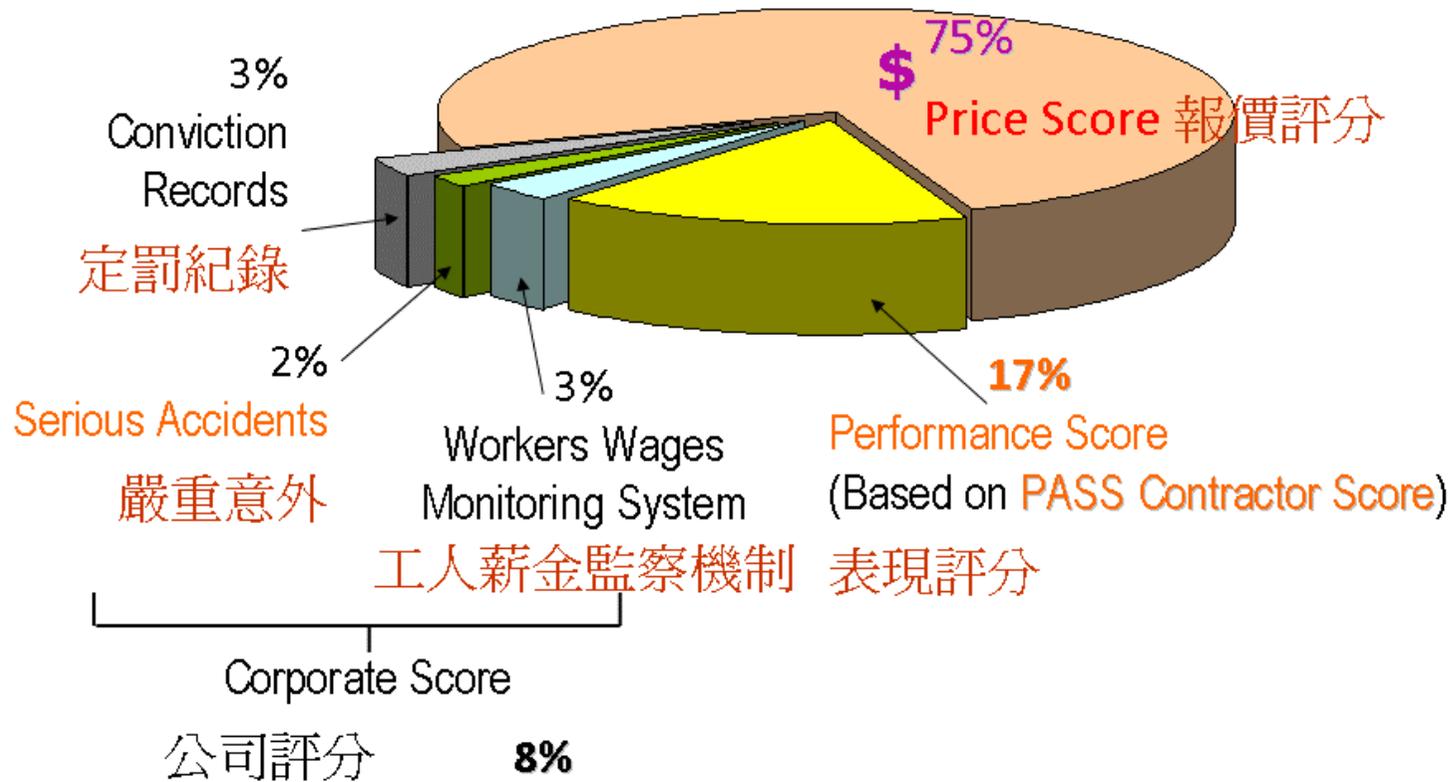


### Performance Monitoring (PASS) 承建商表現評分制

### Evaluation of Tenders 評審標書

### Preferential Tender Award System (PTAS) 評標制度

Composition of the Preferential Tender Score is as follows:



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# Successful measures 成功措施



Strengthen contract requirements and administration 加強合約規定和管理  
 Promoting best practices, over and above minimum legal requirements  
 推廣高於法例最低要求的最佳安全作業模式

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## Improve physical conditions on site 優化工地的工作環境

- Widely adopt mechanization and prefabrication  
廣泛應用機械化和預製建築組件
- Extensive hard paved construction  
硬地施工
- Video surveillance, computerized monitoring, log book, work permit for tower crane  
加強吊運工作的安全管理：閉路視像監察和警報裝置、工程日誌、電腦化系統監察、工作許可證等
- Full height protective barrier to lift shaft opening  
升降機井口的全身式鋼閘
- Metal scaffolding in lift installation  
升降機井槽鋼腳架
- Non-smoking policy with prescribed conditions for designated smoking areas  
推行無煙政策，規定在指定吸煙區的防火配置和清潔條款

## Strengthen site and safety management 鞏固工地和安全管理

- HA Safety Auditing System (also a performance monitoring tool)  
進行獨立安全稽核 (HASAS)，來評估及監察承安全表現
- Pay for Safety (under Integrated Pay for Safety, Environment & Hygiene Scheme)  
安全支付計劃 (安全、環保及衛生綜合支付計劃)
- Safe Working Cycle  
安全施工程序
- Restrict tiers of subcontracting of high risk trades  
限制高風險工作的外判
- Foster planning & design for safety through BIM  
運用建築信息模擬視像化功能來提升工地安全規劃

## Enhance safety awareness 提升行業的安全意識

- Silver Card for personnel engaged in high risk trades  
從事高危行業的工地人員，必須取得銀卡訓練資格
- Specified safety training of site superintendents  
強制工地管理層及督導人員安全訓練要求
- Safety induction and tool box talks  
開工前安全訓練與工具箱安全講座
- Safety training of site staff, professional and technical grade to enhance core competency and skills  
強制安全訓練課程，以加強署方工程人員在工地安全管理上的核心才能、知識及技術
- Issue Safety & Health circulars  
安全與健康通訊
- Issue of Good Practice Promotion Kit, Handbook and Pictorial Guide, in partnership with stakeholders  
與業界攜手合作，出版良好作業推廣套件、手冊和指南



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### Accident and incident management

- "Prevention is better than cure"
- Be vigilant !! -- near misses may bring insights for enhancing provisions for safer operations
- Site accidents and incidents reflect the effectiveness in the implementation of safety management system on individual sites
- Foster proper accident/incident management, by triggering action parties to provide timely reporting, develop response and implement actions to ensure successful recovery from incidents - trigger reviews or interviews by Contract Manager, Contractors Review Committee (CRC) or Procurement Review & List Management Committee
- Tackle potentially high risk activities being the common causes of serious accidents – reporting of near miss / incidents on site (though not serious by immediate effect, may have potentially serious consequence, such as those involving but not limited to falling from height, falling object, being struck by moving object, tower crane lifting, public safety etc.)
- Sharing lessons learnt from incidents, together with the development and implementation of appropriate corrective actions directed to preventing or mitigating the risk of similar occurrences in the future

### 意外和事故管理機制

- 預防勝於治療
- 提高警覺，切勿輕視險失事故
- 工地意外和事故反映工地推行安全管理系統的成效欠佳
- 建立意外和事故管理制度，訂定相關人士準時報告意外或事故的機制 -- 啟動合約經理、承辦商檢討小組委員會 (CRC) 或 採購檢討及名冊管理委員會 (PRLMB) 檢討意外和事故、約見承建商
- 處理可能導致嚴重意外的高危工種或險失事故報告 (例如: 人體或物件從高處下墮、被移動物件撞倒、天秤吊運、公眾安全等)
- 從意外和事故中學習，並採取措施避免意外和事故再度發生

# Successful measures 成功措施



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Foster stakeholders engagement and safety awareness through safety forum, workshop and charter  
 舉辦安全講座、研討會、簽署安全約章，透過持份者參與，提升安全意識



Safety Summit – Construction Safety Week

• Caring • Customer-focused • Committed • Creative



Safety leadership awards (Client – Developer Category) proactively committing to the highest standards of health and safety on our projects, and actively leading our project teams and contractors to achieve them with a very practical approach

安全領導典範大獎（發展機構組別）積極帶領項目團隊和承建商，以切實可行的方法，達到最高的安健水準

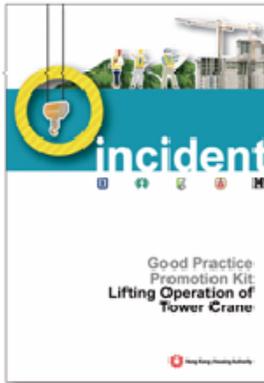


Golden Helmet Award  
金冠獎



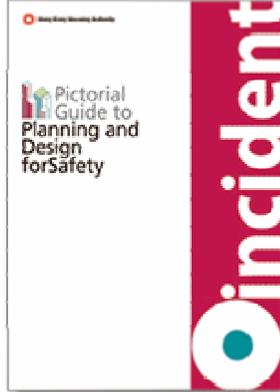
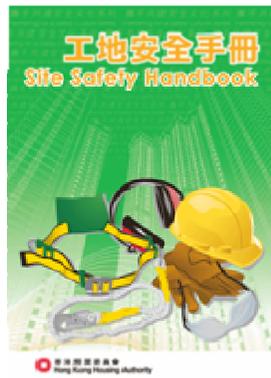
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# Initiatives and way forward 未來路向

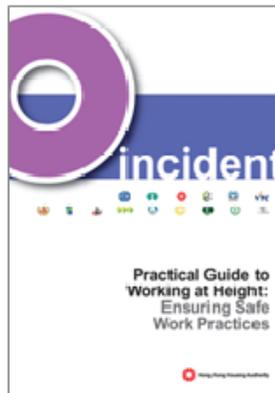


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Engaging stakeholders to promote best practices  
與持份者攜手合作 提倡優良作業模式



Site Safety Website  
建立工地安全網站 以傳達工地安全資訊



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## Ongoing safety targets and performance goals

### 持續安全目標與成效指標

- Target for zero fatal accident, with a performance target for no more than 12 accidents per 1,000 workers  
目標為零致命意外，表現指標為每千名工人不多於**12**宗意外
- Monitor the effectiveness of our initiatives with a view to further progressively improving safety standards, enhancing risk management and achieving continuous performance improvements  
監察房委會措施的成效，以期逐步提高安全標準、加強風險管理和持續改善表現

## Upcoming safety initiatives

### 安全優化措施

- Further enhance Integrated Pay for Safety, Environment & Hygiene Scheme (directions):  
resource, safety management, KPI, safety awareness, innovative measures  
綜合安全、環境、衛生支付計劃優化重點：資源投放、安全管理、成效指標、安全意識、創意措施
- Further enhance HA Safety Auditing System (HASAS) towards a safe system of work approach  
以安全工作系統優化安全稽核制度
- Launch safety auditing system for lift works (HALENSAS) with focus on high risk operations  
推出升降機及扶手電梯安全稽核制度，針對高危工作
- Launch Surprise Safety Inspection Programme (SSIP)  
推出突擊安全巡查計劃
- Strengthen safety of heavy plant / machinery  
加強重型機械安全



- Vision and policy 宏觀策略
  - ★ Safety is **CARING** 「關懷」就是安全之本
- Problems and analysis 問題剖析
  - ★ Employers to **ensure safety of the workplace**  
僱主必須確保工作環境安全
  - ★ Implement **safe working methods** ● cultivate **safe working HABITS**  
訂立和執行**安全施工方法** ● 培養安全的工作**習慣**
  - ★ Strengthen **team work and communication** ● **supervision of high risk operations**  
全面鞏固整體**團隊溝通** ● 加強**監管高危作業**
- Successful measures 成功措施
  - ★ Success is no accident -- **Safety is not an act but a habit**  
成功非僥倖 -- **安全不應只被視作為「行為」**  
而應該被培育而成為「習慣」
- Initiatives and way forward 未來路向
  - ★ **Let's join hand in hand going extra mile!**  
大家一起攜手，多走一步，精益求精！