SUSTAINABLE CITIES AND COMMUNITIES

CLIMATE ACTION

GOOD HEALTH AND WELL-BEING

AFFORDABLE AND CLEAN ENERGY

PARTNERSHIPS FOR THE GOALS

INDUSTRY, INNOVATION AND INFRASTRUCTURE

RESPONSIBLE CONSUMPTION AND PRODUCTION

LIFE ON LAND

CLEAR WATER AND SANITATION

DECENT WORK AND ECONOMIC GROWTH

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COMMUNITY ENGAGEMENT

People are at the heart of every sustainable built environment, inspiring the creation of healthy homes and workplaces for all sectors of the community. With a vision to achieve a sustainable built environment in Hong Kong for future generations, many innovative new projects in the community are having a positive impact: arousing young people's interest in energy saving, developing sustainable and replicable models for driving social change, supporting biodiversity and green education, and sharing experience and knowledge to create a valuable model for the implementation of future smart city initiatives. These projects are proof that all walks of life can participate in behavioural changes, paving the way for the creation of a more liveable home for everyone.

REDUCING HONG KONG'S ENERGY CONSUMPTION THROUGH AN INTEGRATED MODEL - CASE STUDY OF ST. JAMES' SETTLEMENT

Reducing workplace energy consumption through energy monitoring and behavioural change

Background

Electricity consumption is a major contributor to Hong Kong's air pollution, causing respiratory illnesses and environmental degradation. To encourage energy saving by employees, smart energy sensors were installed at 74 service locations of St. James' Settlement (SJS), one of Hong Kong's most well-established NGOs. SJS serves over 3,800,000 person-times annually, with a staff of some 1,200, making it ideal for the implementation of a large-scale energy engagement programme. By utilising data, transparency and recognition of positive behavioural change, this highly successful programme also demonstrates a repeatable energy-reduction model for the entire NGO sector.

Brief Mechanism

To maximise the outcome, this integrated programme adopted the acronym "SAVE":

"**S**ignal": On the front line, each of the SJS's 50 centres appointed a Blue Sky Ambassador to attend energy data workshops. These 50 ambassadors analysed and learnt about actionable saving opportunities in the day-to-day operations of air conditioning, lighting and socket loading in their service centres.

"**A**ction": Each centre manager encouraged his or her ambassador to be creative and experiment with different energy-saving actions.

"**Ve**rification & Reward": Savings outcomes were summarised and emailed weekly after analysis by the Blue Sky artificial intelligence model. Centres then communicated these energy quick wins with staff to deepen the behavioural change and ownership. At a management level, the SJS Green Committee also evaluated the engagement level on a quarterly basis and devised various rewards and competitions to boost participation. The staff and centres with the most outstanding initiatives, actions, savings and participation received awards from the Chief Director.

Outcome / Impact

Comparing year-on-year, energy consumption was reduced by 308,072 kWh, equivalent to planting around 6,000 trees and avoiding 229 metric tons of air pollutants. Overall, the program engaged around 1,200 staff members across 74 service locations. 65% of units achieved an average energy reduction of 12%, with one gym centre achieving up to 43% savings. In total, over 2,509 energy-saving actions were implemented by staff, and SJS remains firmly committed to the further installation and servicing of energy-efficient solutions in all suitable new locations.