

WBCSD TNFD pilot use case: *Swire Properties*

Driving positive impacts through incorporating
nature inclusive design in buildings



World Business
Council
for Sustainable
Development



Context/Disclaimer

This use case showcases examples of Swire Properties' approach to identifying and managing opportunities to increase positive urban nature impacts through green building practices. Although the practice highlighted in this document is somewhat aligned to the [Taskforce for Nature-related Financial Disclosures](#) (TNFD)'s developing recommendations, it is essential to note that Swire Properties' disclosures and reporting were written before the TNFD disclosure framework and LEAP approach were created.

Further, some of the practice highlighted in this document relates to the piloting of projects and methods which are not indicative of company-wide activity. Therefore, this use case should not be considered as Swire Properties' approach to LEAP but rather as an example of how elements of companies' previous nature-related risk and opportunity management, target-setting approaches, and reporting efforts aligns with parts of the LEAP approach.

Sustainability is embedded in Swire Properties governance structure and reflected on their environmental related targets

Process

Swire Properties' **governance structure** incorporates an ESG Steering Committee and various Sustainable Development working groups that support their Sustainability strategy.

The Company's Board oversees sustainable development ("SD") issues and risks, including biodiversity. Its Environmental, Social and Governance Steering Committee reviews the company's ESG strategy regularly and any significant risks, opportunities or investments that exist in connection with the implementation of the ESG Strategy. The Chairman reports relevant matters of significance relating to SD to the Board.

Swire Properties' targets reflect the core role that Sustainability plays in their governance structure. Environmental and nature targets are translated into actions at different stages of Swire Properties value chain, from procurement practices to green building construction and renovation which have great potential to avoid negative impacts on biodiversity.

Output

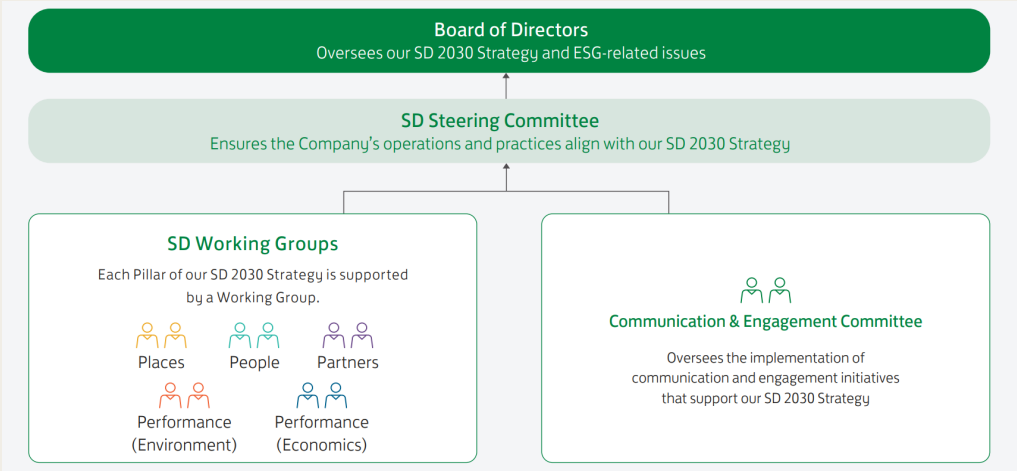


Figure 1: Governance Structure.
Source: [2021 Sustainable Development Report p. 16](#)

The LEAP approach is TNFD's voluntary nature-related risk and opportunity assessment approach for corporates and financial institutions

LEAP has been designed and developed with three overarching considerations in mind:

1. The LEAP approach encourages users to carefully **consider the scope** of their assessment before commencing;
2. Analysts and preparers are encouraged to **consult with relevant stakeholders** as they work their way through the LEAP approach; and
3. LEAP is designed as an **iterative process** – across business locations, business lines for corporates, and across investment portfolios and asset classes for financial institutions – in line with enterprise risk management processes and reporting and disclosure cycles.

LEAP is **not, in itself, a recommended disclosure or a mandated process** to adhere to the disclosure recommendations put forward by the TNFD.

As such, not everything that is identified, assessed and evaluated using the LEAP approach needs to be disclosed.



Figure 2: Overview of LEAP

This use case covers Swire Properties' journey to target setting and their translation into actions and opportunities

E Evaluate Dependencies & Impacts

Swire Properties conducts a study to understand the nature-related dependencies and impacts of their business operations and wider value chain. For instance, they conduct a biodiversity study, in partnership with an academic institution, during the redevelopment of Taikoo Place.

A Assess Material Risks & Opportunities

Swire Properties identifies material risks and opportunities where their existing portfolio operate and at new development locations. Using outputs from the Evaluate phase, Swire Properties identified opportunities to enhance urban biodiversity.

P Prepare To Respond & Report

Swire Properties' assessments of dependencies, impacts, risks and opportunities informs their Biodiversity targets, their Biodiversity policy and their procurement processes.

Swire Properties integrate biodiversity considerations into targets, policies and procurement processes

Process

The Company's ("SD") 2030 Strategy help to ensure that **Sustainable Development considerations are a part of all its operations and business decisions across their value chain.**

To do this, Swire Properties considers potential impacts and dependencies on nature at each stage of the value chain. Performance targets are set to guide the company progressively towards its Sustainable Development vision – to be the leading sustainable development performer in the industry globally by 2030.

Output

P2 Swire Properties sets targets for biodiversity and sustainable sourcing requirements

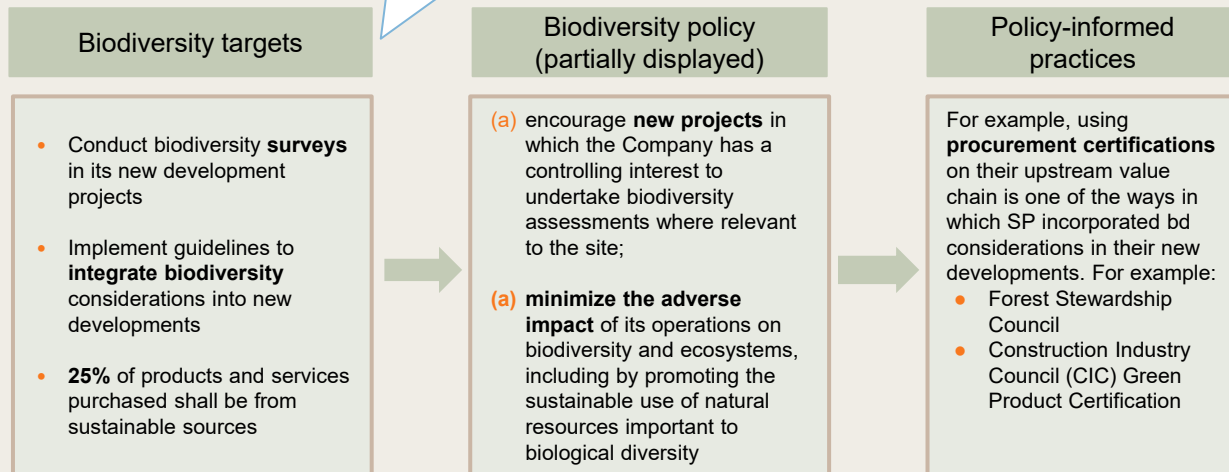


Figure 3: Diagram explaining how Swire Properties' biodiversity targets inform targets, policies and procurement practices



The Construction Industry Council (CIC) **Green Product Certification** is a Hong Kong-based certification scheme that provides a comprehensive approach to assess sustainability criteria such as carbon footprint, greenhouse gas emission, human toxicity, resource consumption and ecosystem impact. Its aim is to provide transparency to stakeholders on sustainability criteria to stimulate procurement of greener materials and products. The certification covers the life cycle of a building, including resource extraction, manufacture, transport, construction, use, refurbishment, demolition and waste.

Note:[1] For Swire Properties wholly-owned new and existing investment portfolios

Swire Properties have piloted biodiversity assessments at new developments to assess the interface with nature and impacts on urban biodiversity

E4 Swire Properties collects data on their impact on the local biodiversity to help measure the impact of their operations

Process

Swire Properties partnered with the University of Hong Kong to conduct a study on biodiversity in one of their new locations: Taikoo Place.

The objectives of the study were to:

- Develop a **baseline for urban biodiversity** at Taikoo Place
- **Propose measures** in the master landscape plan to further enhance urban biodiversity in the future
- **Evaluate the urban biodiversity after** the completion of the Taikoo Place redevelopment project

The results revealed that:

- The redevelopment project allowed the **creation of a substantial landscaped area, amounting to 35%** of Taikoo Place, which is highly beneficial from an urban forestry perspective.
- The **inclusion of large-sized native tree species** has made Taikoo Place more attractive to urban biodiversity.

Output

A two day study at Taikoo Place collected data on:

Species

- Total number of species
- Number of native species, exotic species, exotic species with known ecological value
- Total Number of species with known ecological value



Individuals

- Total number of individuals, native individuals
- Total number of exotic individuals, exotic individuals with known ecological value, individuals with known ecological value



Figure 4: Species identification in Taikoo Place



Spotted Dove (*Spilopelia chinensis*
珠頸斑鳩)

Eurasian Tree Sparrow (*Passer
montanus* 樹麻雀)

Urban biodiversity recorded in the study is typical of those in Hong Kong

Figure 5: Example of species found

Swire Properties look for opportunities to integrate Nature-based solutions when planning new developments

Process

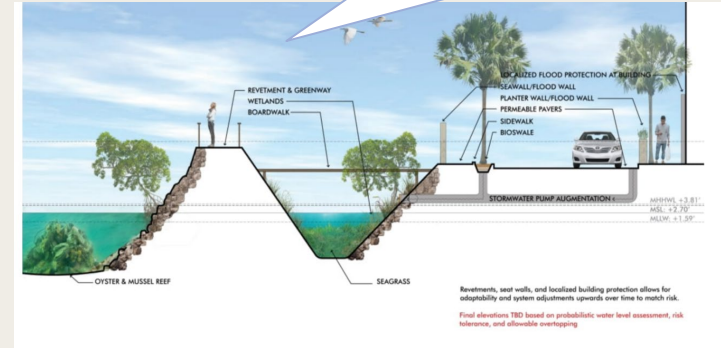
For example, Swire Properties engaged an engineering firm to research, design and propose a hybrid and more natural long-term environmental solution to preserve Miami's urban coastline.

- The plan envisions a series of **barriers to dissipate wave energy** including a combination of submerged oyster reefs and flood protection earthen berms in the bay.
- This plan has provided a **platform for municipalities to discuss viable nature-based solutions** as an alternative to physical barriers against flooding.
- The benefits of this plan include having both a **functional and aesthetic appeal**; being built to tackle extreme weather events of the next 30 to 50 years

In Taikoo place (see figure 7), Swire Properties built a dual-level roof of integrated solar PV and green roof with multiple benefits for the environment. The cooling effects of green rooves enhances photovoltaic (PV) efficiency and output whilst reducing building heat gain and cooling demand along with its associated operating costs. This design also benefits the environment, for example via carbon sequestration and habitat creation.

Output

- A2 Swire Properties assesses ways to incorporate nature-based solutions into developments, to create nature-related opportunities
- A3



Figures 6: Example of nature-based solutions in Miami



Figure 7: dual-level roof of integrated solar PV and green roof

The insights gathered from previous studies will inform Swire Properties' biodiversity strategy, solutions to further increase positive impacts on urban biodiversity of its properties and increasing community awareness

Process

After conducting their project on Taikoo Place, Swire Properties identified lessons learned which can be implemented in future developments. Some of the learnings identified include:

- Development of a **biodiversity database** with technical data on plants occurring and/or planted at sites, including botanical names, flowering period and count to allow long-term monitoring of the biodiversity status of its portfolio
- **Leveraging technology** to enhance engagement with tenants and visitors. For example, using Bluetooth beacons to share facts about plant and animal species on tenant and visitor mobile devices to increase awareness and foster conservation behaviours.
- Strengthen **green corridors at new developments** to promote nature connectivity
- **Integrate nature-based solutions** in development design and strategy to enhance biodiversity, increase climate resilience and provide aesthetic appeal.

Output



Bird boxes



Bat boxes



Insect hotels

Figure 8: Example of good practices for future projects

P1

Swire Properties uses the learnings from past projects to incorporate best practices into future developments