Chinachem Group
Sustainability Conference 2022
Creating Social Impact on the Zero Carbon Journey in Hong Kong

Chris Trott
Head of Sustainability & Partner
Foster+Partners

Summary

How the community and environment benefit from refurbishing the historic industrial building Ombú

- We approach projects in sustainability terms: wellbeing, community impact, energy and carbon, mobility, resources, water, land and ecology, social equity, planning for change, and feedback.
- Ombú saw 80% water reuse, an addition of 300 trees and 12,000m^2 landscape, and 50% car reduction. 10,000 tonnes of brickwork and all 12 steel trusses were retained.
- We calculate carbon and ecological footprint of our projects.
- We take a long-term view when calculating carbon, from the preliminaries of the design to the structure, future needs of refit, and energy consumption throughout its life.
- The embodied carbon of a new build would have been 12.5tCO_2/m^2 while retaining Ombú with new extension is 9.4tCO_2/m^2, a 25% reduction.
- Ombú has a one planet ecological footprint, a balance of the sources of emissions and the sinks to absorb them. No climate change will be resulted throughout the period of use.
- Ombú has increased the respect for heritage, urban regeneration, biodiversity and ecology, accessible outdoor public space, employment and the value of existing buildings; while reducing hard surfaces, car use, pollution, resource use, CO_2, water, other waste streams and climate change.

CHINACHEM GROUP
華懋集團

華 懋 集 團
可 持 續 發 展 論 壇 2 0 2 2
香 港 零 碳 之 旅 • 創 造 社 會 效 益

Chris Trott
Foster+Partners
合夥人兼可持續發展主管

重 點

Ombú歷史工業大樓的重建如何惠及社區和環境

- 按可持續發展概念制定項目細節：身心健康、社區影響、能源及碳、流動性、資源、水、土地和生態、社會平等、應變計劃及社會迴響。
- Ombú 80%有用水經循環再用；增加300棵樹和12,000平方米園景；減少50%汽車使用。其10,000公噸磚結構和12條鐵桁架獲重用。
- 計算項目的碳排放和生態足印。
- 以長遠角度計算碳排放，涵蓋設計前期階段，以至建築物結構、未來翻新需求和能源消耗量。
- 興建一幢全新建築的隱含碳排放為12.5tCO_2/m^2；翻新和擴充Ombú為9.4 tCO_2/m^2，減低25%。
- 此項目在生物承載力和生態足印之間取得平衡，在整個過程沒有造成氣候變化。
- 此項目在對歷史建築的尊重、市區重建、生物多樣性及生態、戶外公共空間、就業和現有建築價值，皆有正面影響；同時減低硬質表面，汽車使用、污染、資源、二氧化碳、用水、其他廢物和氣候變化。

CHINACHEM GROUP
華 懋 集 團