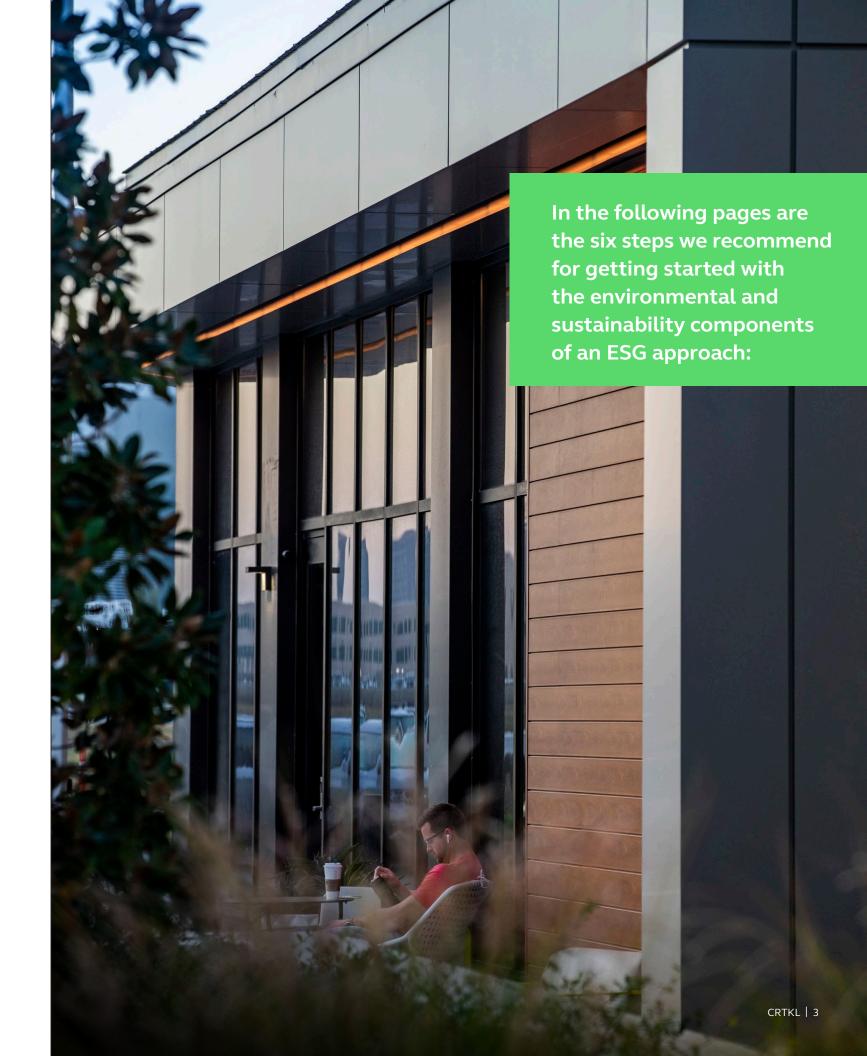


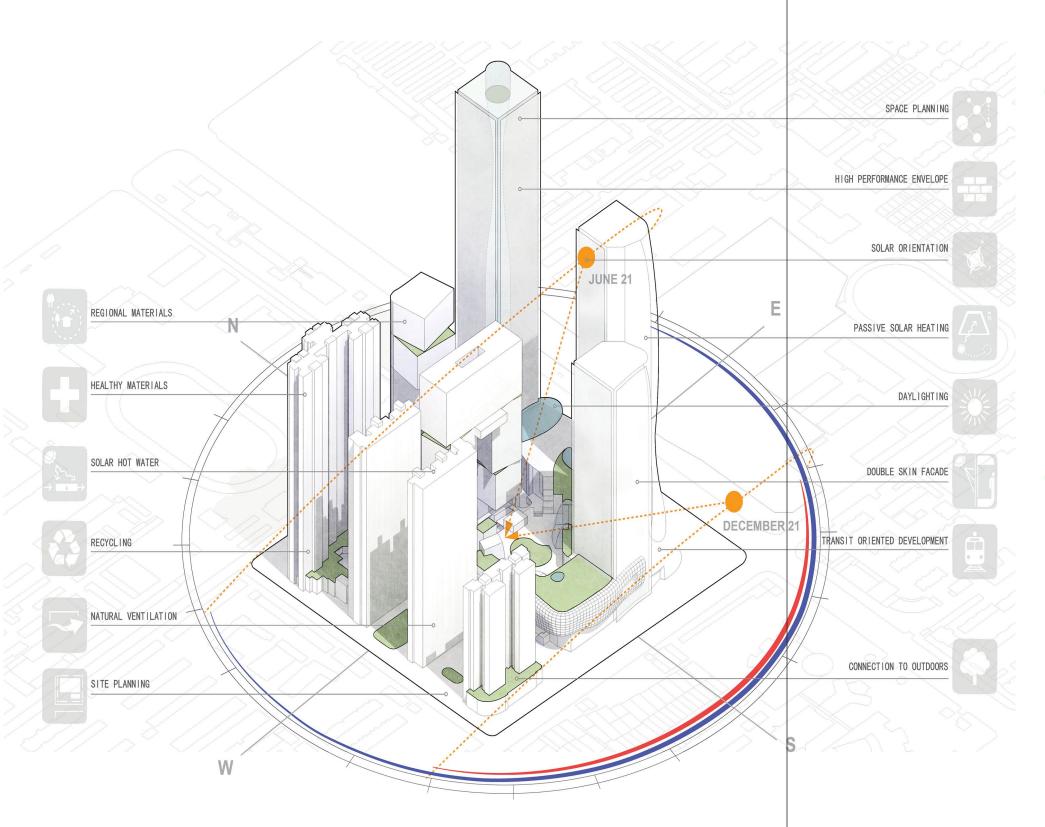
Part One of this series looked at how Environmental, Social, and Governance (ESG) is influencing the hospitality industry, and how sustainable design solutions can lead to reduced costs, increased revenue, and satisfied stakeholders.

Part Two took a deeper dive into the investment landscape, and how ESG can build value for new or existing hotel assets. Part 3 offers a five-step approach with the strategies and solutions for doing so.

Those in the hospitality sector have reached a fork in the road in which the choice to create an approach to Environmental, Social, and Governance (ESG) has forged two paths. Based on the expectations and requirements of the diverse set of hotel stakeholders articulated in <u>Part 1</u>, and the shift of the investment landscape toward a greener and more just future described in <u>Part 2</u>, there are several strategies that hotels can implement to join the path of the industry and the broader world. These strategies apply to new builds and renovations, spanning the interior to the exterior, the environment to the local community, and the local to the global.

Designing or renovating a building that responds to new ESG expectations of hotel stakeholders begins with an informed response to site, climate, culture, and people. It is more than a technical problem. Instead, design decisions are based on a comprehensive study of the climate and cultural values of the given area, which then inform and enrich the form and future of the hotel. Current green building assessment methods are useful for communicating the sustainability of a building to investors, operators, and guests. However, this is just one part of the systems-approach strategy, which establishes positive links with place, people, and context to create a comprehensive response to ESG that goes beyond sustainable industry standards.





SETTING TARGETS AND BASELINES

At the start of the project, the design team and client should establish the sustainability criteria, as well as the reporting methods for the construction process all the way through to building operations. Conducting a Life Cycle Cost Analysis (LCCA) will identify and evaluate the most effective mechanical systems, as well as asses them for energy and lifecycle performance using baselines and benchmarks such as the ASHRAE standard and WELL.

PASSIVE DESIGN

A sustainable response to climate and community does not always require technological innovation. Passive design strategies realize a connection between the building with its surrounding environment, while high-performance mechanical systems and renewable energy ensure sustainability. In this way, we can create livable spaces in all climates.



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CARBON STRATEGIES

Buildings' carbon emissions are affected by their design and include emissions from non-renewable energy used to operate the building as well as embodied carbon in the building materials. **Both must be minimized** and powered by renewable energy or, as a last resort, offset to achieve net zero across the lifecycle.

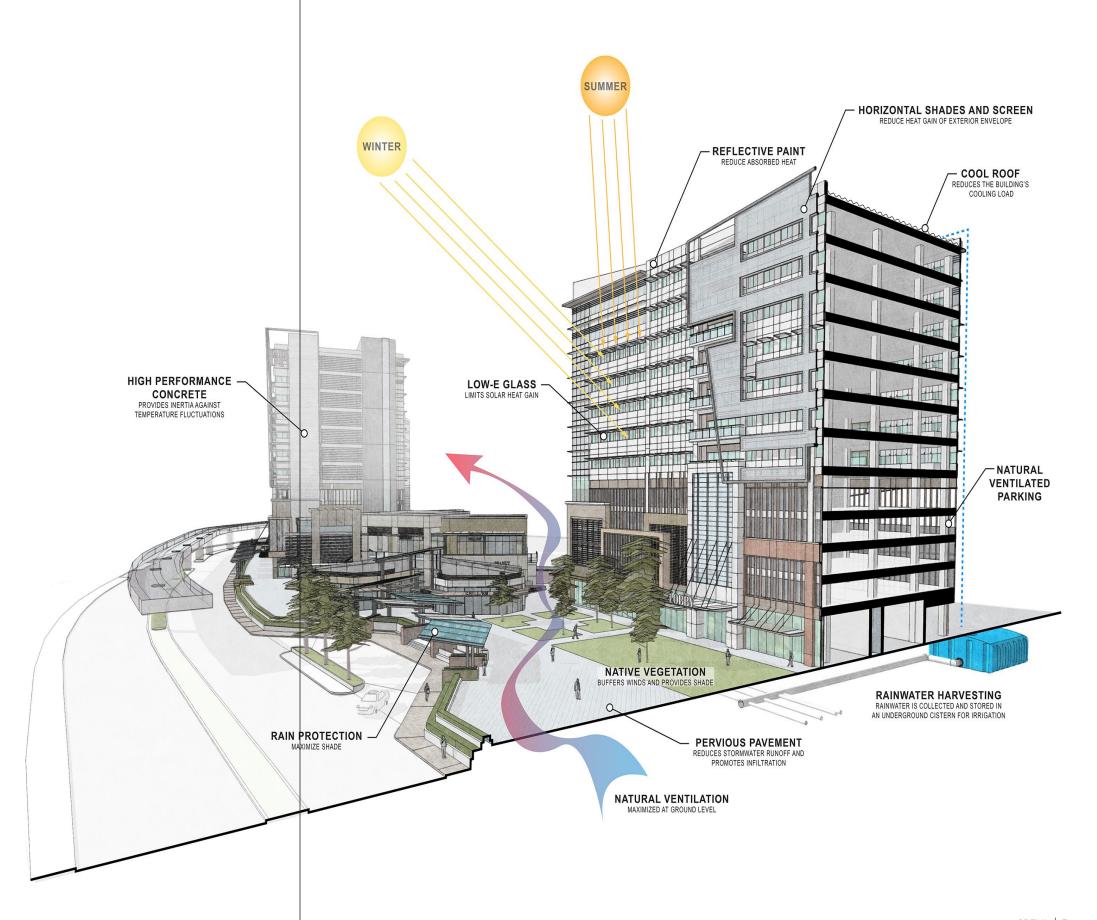




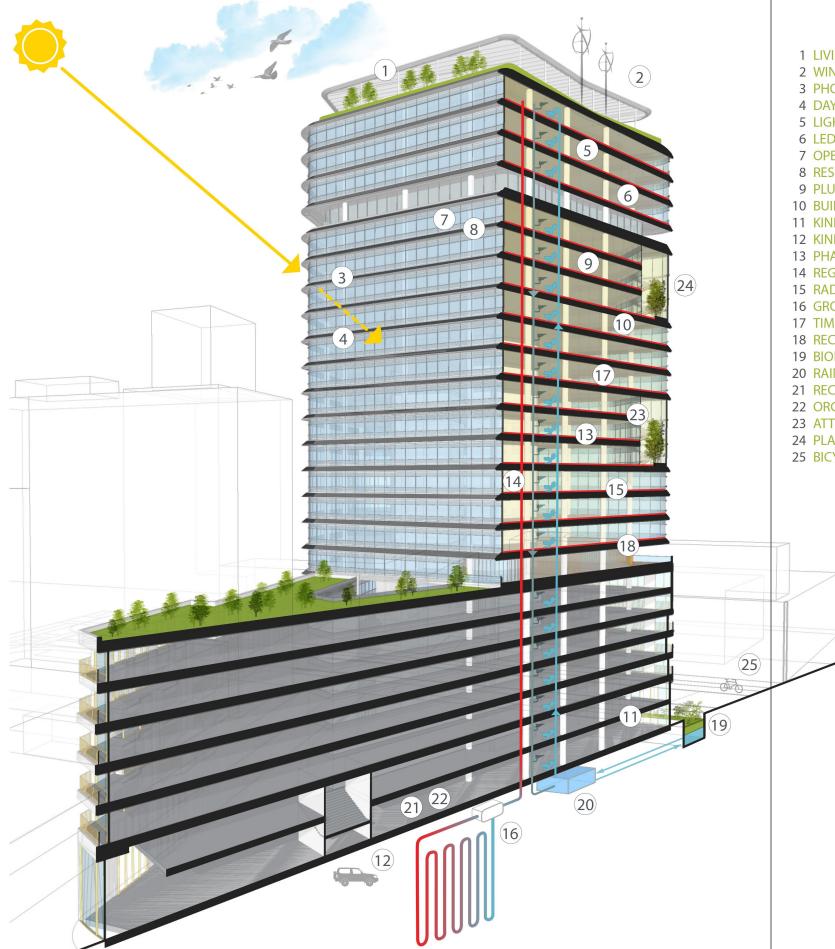


WATER STRATEGIES

Reducing the water footprint of a property has a direct effect on the global environment, as well as the operators of a building responsible for paying the bills to heat and pump water. Achieving water neutrality on a site requires offsetting the impacts of water use by recycling water and producing zero waste. These considerations are critical for regions of the world experiencing or anticipated to experience a water crisis in the coming decades.



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- 1 LIVING ROOF PROMOTES BIODIVERS
- 2 WIND ENERGY
- **3 PHOTOVOLTAICS**
- 4 DAYLIGHTING
- **5 LIGHTING OCCUPANCY SENSORS**
- 6 LED LIGHTING
- 7 OPERABLE WINDOWS
- 8 RESPONSIVE SHADING
- 9 PLUG LOAD CONTROLS
- 10 BUILDING MANAGEMENT SYSTEM
- 11 KINETIC FLOORS
- 12 KINETIC ENERGY FROM CARS
- 13 PHASE CHANGE MATERIAL
- 14 REGENERATIVE ELEVATORS
- 15 RADIANT FLOOR SYSTEM
- 16 GROUND SOURCE HEAT PUMP
- 17 TIMBER STRUCTURE
- 18 RECYCLED / HEALTHY MATERIALS
- 19 BIOLOGICAL LIVING SYSTEM
- **20 RAINWATER CISTERN**
- 21 RECYCLING
- 22 ORGANIC WASTE COMPOSTING
- 23 ATTRACTIVE STAIRS
- 24 PLACES OF CONNECTION
- 25 BICYCLE FRIENDLY



DESIGNING FOR HEALTHY **COMMUNITIES**

Social and environmental strategies often overlap and directly impact each other. A high-performing building will ensure the air and water is clean, minimize chemical and noise pollution, and enhance the natural world rather than take away from it. A property that serves as a positive addition to a place will enable connections between the hotel and local community, while responding to guests' desire to foster a deep understanding of the surrounding area, its challenges, and its people.



BUILDING WITH LOCAL PRODUCTS

Using locally sourced products and materials is a simple way to benefit the community and reduce the carbon footprint of the building. The proximity of local materials lowers the amount of fuel used in their transport, minimizing greenhouse gas emissions and therefore the impact on the environment. Purchasing local materials also stimulates the economy and benefits the surrounding communities and their businesses.



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Todd is an Director with CRTKL, leader of the firm's regional Commercial Practice Group for Europe and the UK. Having relocated to the London office in August 2011, Todd will build on over three decades of experience as a recognized expert in the planning and design of mixed-use and hospitality driven environments and developments. His extensive worldwide experience from Asia, to Europe and the Middle East, Latin America and North America, covers the full spectrum of hotel brands and includes convention hotels, boutique resorts, extensive property repositioning, renovations and master planning as well as multiple significant mixed-use projects.



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