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Is It Healthy to Turn Green?

Clark Kellogg
Director of Strategic Services
Gordon H Chong & Partners

Green design is gaining momentum among healthcare companies and architects, but there remains a significant gap between the desire to design, build, and operate a green building and the reality of designing, building, and operating a green building. Some of the barriers are technical. Others are organizational. Still others are regulatory. And, as the saying goes, "Sometimes the steepest part of the learning curve is attitude." This is a story about how a large, bureaucratic organization engaged in a fiercely competitive industry is quietly turning green.

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This is a story about how a large, bureaucratic organization engaged in a fiercely competitive industry is quietly turning green.

The Dichotomies of Scale

Conventional wisdom has it that when the client company is large, the resistance to green design, or any form of change, is strong. When the client is in an industry that has volumes of regulatory requirements, the impediments seem to grow exponentially. When the client is the nation's largest nonprofit healthcare plan, it combines the worst of both worlds: the resistance to change that comes with size and the regulatory environment that comes with the healthcare industry.

So how is it that Kaiser Permanente, with 8.4 million members and 122,000 employees, is able to make any headway at all with sustainable practices? It may seem counter-intuitive, but Kaiser Permanente is able to adopt sustainable design practices precisely because it is a large, bureaucratic institution in an industry saturated with regulations and compliance requirements. Understanding this seeming contradiction has been part of our firm's work with the healthcare giant.

As a member of Kaiser Permanente's Alliance Program--a stable group of architects and contractors serving Kaiser Permanente's design and construction needs--our firm, Gordon H. Chong & Partners, is fortunate to be a witness to, and a participant in, Kaiser Permanente's growing green initiatives. A member of our firm's healthcare studio, a LEED accredited professional, was asked to join Kaiser Permanente's Green Building Committee to contribute the perspective and knowledge of an outside architectural firm. This experience, combined with our firm's ongoing work designing Kaiser Permanente hospitals and medical office buildings, has given us the opportunity to serve, advise, and learn from Kaiser Permanente as it moves toward sustainable building and operating practices.

There are three factors that are enabling Kaiser Permanente to incorporate sustainable practices. The first is people. There is a courageous group of committed leaders within the company who lead the capital projects effort. The second is scale. Kaiser Permanente is currently building almost 38 million square feet of hospitals, medical offices, administrative offices, and parking structures. Because of its sheer size, many suppliers (our firm included) are eager to grow skills and knowledge to serve Kaiser

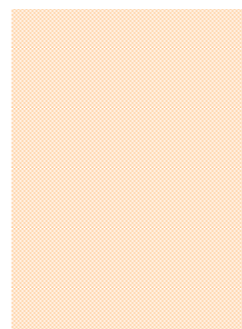
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Permanente's goals. The third is cost. Sustainability, among its many facets, is a cost-containment strategy that can deliver significant benefits to a company that runs 29 medical centers and 423 medical offices in 10 states, with operating revenues of nearly \$20 billion. At this scale, fractional "green gain" amounts to millions of dollars that drop straight to the bottom line. It's a clear case of good design equaling good business.

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A Paradigm "Sift"

Large organizations tend to think that incorporating sustainable design standards requires a significant change in perspective. Interestingly, Kaiser Permanente's greening has not necessitated a radical transformation. The organization has been monitoring the performance of almost everything it does since its founding 57 years ago. Extending this "measurement mentality" to building performance is not a difficult task. It requires a different set of diagnostic tools in some cases, but not a completely new mindset. This is an important point because it shows that the change-resistant behavior of big organizations need not impede the adoption of green practices.

Two other factors tilt Kaiser Permanente toward sustainability. These may be described as a carrot and a stick. The corporate mission holds the carrot: "Kaiser Permanente's mission is to improve the health of the communities we serve." Connecting this mission to the benefits of sustainable practices is not a huge reach. The stick is carried by new regulations aimed at improving safety and reducing the high volume resource consumption, waste, and pollution that the healthcare industry generates.

For facilities leaders, the stick is a big stick indeed. California's aggressive seismic upgrade requirements for hospitals have launched a massive rebuilding effort, and the greening of Kaiser Permanente meshes very well with this imperative. The organization has 14 hospitals in California requiring immediate seismic upgrades to comply with seismic code. Four more campuses will need significant renovation during the next decade. And there are an additional 80 medical office buildings, along with call centers, labs, utility plants, and parking structures, that may be included in these programs. Kaiser Permanente has projected appreciable cost and health gains from incorporating sustainable practices in the design, construction, and operation of its facilities. This is equally true of service delivery.

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Thinking Inside the Box

One group within the organization, National Facilities Services, is responsible for all of Kaiser Permanente's facilities. Its approach to greening this staggering volume of work began with conversations about culture, strategy, leadership, leverage, and learning. Out of these conversations came two foundation documents on sustainability, one communicating the organization's focus and the other its strategy. Both are linked to existing corporate values and are shrewdly framed for viability within the organization's bureaucracy.

Focus of Sustainability Efforts

- Align practices with protecting the environment
- Waste minimization
- Pollution prevention
- Resource conservation
- Link environmental safety with worker and patient safety
- Eliminate, collaborate, educate

Strategy for Developing Sustainable Practices

- Experiment to build knowledge and experience in low-risk settings
- Expand to grow the knowledge and support
- Execute to institutionalize the strategies into the design and construction process

To all but the largest organizations, and certainly to most environmentalists, these ideas may seem obvious or, even worse, trite. The strength of these ideas lies not in their innovation but in their near-universal applicability throughout Kaiser Permanente's organization. This is a practical lesson for any organization moving toward green practices. Simple ideas with broad application can generate powerful results.

Kaiser Permanente then formed a Green Building Committee to "operationalize" the strategy. Again, the first product of the Committee was words, in this case a position statement on Green Buildings.

Kaiser Permanente's mission is to improve the health of the communities we serve. In recognition of the critical linkages between environmental health and public health, it is KP's desire to limit adverse impacts upon the environment resulting from the siting, design, construction, and operation of our healthcare facilities. We will address the life-cycle impacts of facilities through design and construction standards, selection of materials and equipment, and maintenance practices.

Additionally, KP will require architects, engineers, and contractors to specify commercially available, cost-competitive materials, products, technologies, and processes, where appropriate, that have a positive impact or limit any negative impact on environmental quality and human health.

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This statement is not remarkable. It doesn't turn heads among the eco-efficiency crowd. Taken together, the focus, strategy, and positioning statements are hardly an environmental wake-up call. They are more like a green yawn. And that's just the point. The leaders of National Facilities Services are using the existing structures, procedures, and culture to (as the strategy statement says) experiment, expand, and execute. It's like taking a favorite family recipe and using egg substitutes instead of eggs. You might not taste the difference yet it's better for you. If, like Kaiser Permanente, you are serving 8.4 million guests, things start to get interesting fast.

Buying in Bulk

Kaiser Permanente's massive purchasing power is the key factor in achieving green results. When it alters a specification, it creates a significant ripple effect throughout the healthcare industry. Recently, for example, Kaiser Permanente responded to findings that 8 percent to 12.5 percent of healthcare workers suffer from some form of latex sensitivity. It changed the purchasing specification to eliminate latex in exam gloves. The result was a change in the entire exam glove industry to safer materials.

National Facilities Services is starting to leverage Kaiser Permanente's purchasing power through:

- The Alliance Program of architects and contractors who are committed to KP's standards and to incorporating green insights from their non-KP projects
- National purchasing agreements that incorporate green performance or content
- Specifications for energy-efficient lighting and occupancy sensors
- Variable-air-volume systems in medical office buildings to match air supply to demand
- Computer-controlled energy management systems to prevent overheating and overcooling
- Site planning and building massing that optimizes light, air, and passive solar strategies
- Water-efficient landscaping and erosion control
- Integration of alternative transportation options
- Cogeneration of energy

Further, Kaiser Permanente is completing pilot projects on three construction sites. These are a remodeling of a 21,000-square-foot medical office building in Panorama City, Calif.; a new medical office building in East Los Angeles; and the replacement of its largest medical center on Sunset Boulevard in Los Angeles. Kaiser Permanente bases most of its decisions on what it measures, and it is starting to get some numbers back on these projects.

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In Panorama City--the medical office building remodeling project--the focus was on construction impacts. Using green pilot standards for demolition and procurement, Kaiser Permanente has:

- Diverted 297 tons of demolition debris away from landfills
- Donated 11 tons of equipment and furnishing for reuse in the surrounding community
- Discovered that specifying recycled content materials and utilization of green design strategies is time- and cost-neutral at first cost (before calculating life-cycle savings).

In East Los Angeles--the new medical office building--the pilot project focused on downstream uses of a demolished warehouse store on the site. The "green demolition" yielded:

- 1,008 tons of asphalt recycled for roadbeds
- 1,708 tons of concrete recycled for roadbeds and back fill
- 896 tons of brick resold
- 84 tons of steel to be melted and used in new steel production
- A finding that contractors have no difficulty recycling

In Los Angeles--at the medical center on Sunset Blvd.--the focus is on design impacts. In cost- and time-neutral first costs, the building will feature:

- Paints with low volatile organic compounds (VOC)
- Glazing and surface materials that control heat gain
- Waste minimization and recycling that is programmed into designed spaces
- Occupancy sensors that conserve energy
- Landscaping that minimizes water usage
- Paving and streetscape features using recycled content
- Recycled or donated demolition debris
- A facility design that encourages and supports mass transit

These results contain no surprises. For National Facilities Services, that's good news. These pilot projects have validated National Facilities Services' case for sustainable practices in terms that satisfy even the most incorrigible bean counters: They were ahead of schedule, on budget, with lower life-cycle costs.

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Talking the Walk

The leaders of National Facilities Services haven't popped the corks on bottles of organic champagne just yet. They essentially have a proof of concept story at this point. The real work lies ahead. The group has about 20 facilities development team managers, each responsible for a specific geographic area. These managers have broad responsibilities and accountability for all construction in their regions. As a group they have a keen interest in sustainable principles, but implementing them leaves little room for error within an organization that has highly specific criteria for accountability.

To these senior facility managers the aggressive greening of Kaiser Permanente is like "flying the airplane and redesigning it as the same time." In this environment, communication becomes critical. Green knowledge, experience, and learning are all accelerating. The resilience of this group in managing change holds lessons for almost any organization. It meets monthly for training, evaluating of ongoing efforts, and planning ahead. The group also sponsors an annual Project Excellence Award to spread awareness beyond the group to the entire organization. Using green strategies is a key criterion for winning.

The Green Building Committee is the lead group for knowledge and learning beyond Kaiser Permanente. In addition to the architectural representative from our office, outside contractors and engineers also sit on the committee. We all bring knowledge of Kaiser Permanente and other projects to the work of the group. This has helped to strengthen the inside/outside partnership.

The Alliance Program, the stable group of architects and contractors, has a similar communications strategy. Our firm is one of many climbing the learning curve with National Facilities Services. At the end of a particular project, that learning doesn't disappear; instead, it goes right into the next project. We are able to invest in the relationship with Kaiser Permanente in ways that the economics of project-by-project relationships don't allow. Like most firms, we are always eager to share what we learn from other parts of our practice, green or otherwise, on the theory that "a rising tide raises all boats." The Alliance Program structure makes it much easier and the results more tangible. Because we are contractually committed to use Kaiser Permanente's design and material standards, we try to make thoughtful contributions to the development of these standards. We are not always in agreement with our client. But the structure of the Alliance Program allows us to raise questions and voice opinions without feeling like we are putting our client relationship, and therefore the economic health of our firm, at risk. With the Alliance Program, Kaiser Permanente has created a powerful communications circuit in which all the members can contribute to the whole.

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To reach what Malcolm Gladwell calls the Tipping Point--at which an idea gains enough momentum to move forward on its own--it will be necessary to expand the conversation to all of Kaiser Permanente's 122,000 employees. To achieve their ultimate goal, National Facilities Services will need to demonstrate yet another obvious but elusive outcome: establishing the relationship of sustainable design and operations to patient health, safety, and healing.

Stewards of Stewardship

The effort of National Facilities Services is, in many ways, its own story of stewardship. The group has taken on the stewardship of the sustainable design effort within Kaiser Permanente. In order to implement sustainable principles in the nation's largest nonprofit healthcare company, it has designed a process that aligns with the organization's processes and translates "greenspeak" into Kaiser Permanente's house language. Moreover, its members are actively engaging in the conversation. By bringing outside firms into the discussion, the group has strategically increased everyone's investment in the outcomes. These investments will pay handsome dividends to Kaiser Permanente, to our firm, and to the 8.4 million members of the Kaiser Permanente healthcare plan.

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