

DENNIS WILDE

Reaching beyond Platinum

Net zero is not enough.

IN MANY WAYS, EACH feature of Oregon Health & Science University's new Center for Health & Healing (CHH)—a facility in Portland dedicated to medicine and wellness—enhances the health of humans and the environment: from the mood-enhancing daylight to the nontoxic materials, improved indoor air quality, and significant reduction in energy and water use.



The 16-story Center for Health & Healing, one of the largest LEED-certified Platinum projects in the country and the first medical facility in the world to be built to this standard, uses 62 percent less energy and 56 percent less water than a conventional building. However, a broader industry goal is to create buildings that produce more energy than they consume and consume more waste than they generate.



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Though the CHH—Platinum certified under the Leadership in Energy and Environmental Design (LEED) program—uses 62 percent less energy and 56 percent less water than a conventional building, a broader industry goal is to create buildings that produce more energy than they consume, and consume more waste than they generate. Buildings being erected today are a 200-year asset, and the only way to

reduce their environmental footprint is to make them *replenish*, rather than deplete, natural resources. Constructing net-zero buildings is not enough.

What once was revolutionary is now becoming standard. With eco-roofs sprouting on more and more buildings, rainwater runoff has been reduced by 40 percent in Portland's South Waterfront district. Many other pioneering features—among them displacement ventilation, photovoltaic panels, chilled beams, materials free of urea-formaldehyde and volatile organic compounds (VOCs), and dual-flush toilets—are starting to appear across the Portland market.



Green building needs to be pushed to the next level. LEED certification is still relatively new, and only a handful of buildings have been Platinum certified. Creation of buildings that have smaller and smaller footprints and that are economically viable requires increased investment in new technologies and a greater commitment from the marketplace—public/private

partnerships, business leaders, and consumers.

On the technology front, a number of new products and processes have come into existence—for example, a plasma arc generator, which uses extreme heat to transform waste into energy; and on-site treatment of sanitary waste so that none leaves the site. Wind turbines need to be successfully integrated into more buildings, and use of photovoltaics needs to increase. Investment in research is needed at the federal and state level to bring these ideas to fruition.

Public institutions and private sector businesses must be willing to take risks and explore new technologies that deliver a good return on investment through long-term cost savings and environmental protection. People also need to learn to do more with less—for example, by incorporating natural ventilation to heat and cool buildings instead of relying on massive heating, venting, and air-conditioning systems.

Consumers play a key role in market transformation as well. For example, at the emerging South Waterfront district, one of the largest sustainable urban redevelopments in the nation, green is a key marketing feature. All the condominiums in the Meriwether, one of four residential tower projects in the district, sold out nine months before the building opened—a trend that is happening across market segments in Portland.

To bring investors and customers on board, awareness of sustainability must be increased until it becomes a shared public value. At the same time, developers, architects, planners, and builders have a

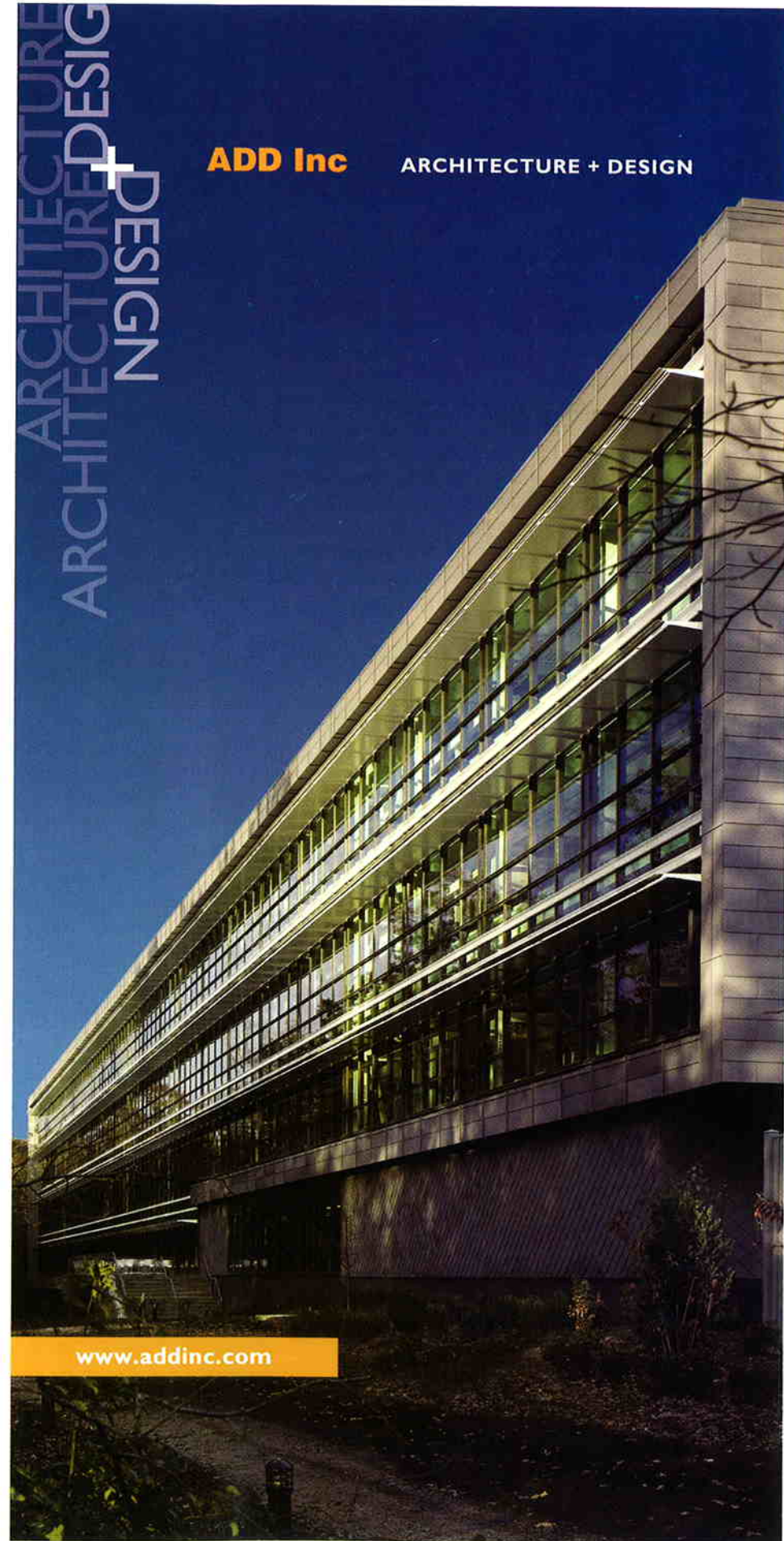


Portland, Oregon's South Waterfront district, one of the largest sustainable urban redevelopments in the country, is located on 130 acres (53 ha) of formerly underused industrial land in the city's downtown core. The project includes the Meriwether (on far left), which consists of two residential towers, both certified LEED Gold. The John Ross (far right), a 31-story elliptical building with 303 residential units, opened in April and is expected to earn LEED Silver certification. Atwater Place (second from right), a 23-story condominium building with 212 residential units, is slated for completion this winter.

responsibility to create great places in which to work, learn, and live. A building is the beginning of a vision for a place that will thrive—economically, socially, and environmentally. If that building can enhance city services, spark creation of retail businesses and cultural gathering places, connect to public transportation and shared open space—and do all this with a small and environmentally sound footprint—it will become a community asset whose value far exceeds that on its balance sheet. **UL**

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