THE COSTCO CONNECTION

April 2016 • Volume 31 • Number 4

A lifestyle magazine for Costco members

Earth man

Earth Day leader Denis Hayes wants to help save the world by changing the way we build

PAGE 32

Environmentalist Denis Hayes creates a living building

Building the future

OUR DIGITAL EDITIONS
Click here to see Denis Hayes talking about the Bullitt Center. (See page 11 for details.)

RICK DAHMS

By Steve Fisher

SUSTAINABILITY. IT'S A word that has achieved a high level of visibility and desirability worldwide. In a 2012 speech, United Nations Secretary-General Ban Ki-moon said, "Ours is a world of looming challenges and increasingly limited resources. Sustainable development offers the best chance to adjust our course."

Among those at the forefront of sustainable development is Costco member Denis Hayes, president of the Bullitt Foundation. If neither of those names rings a bell, add them to your mental database of people and organizations fighting for Earth's future.

The birth of an environmentalist

Hayes was born in Wisconsin in 1944 but spent most of his upbringing in the small town of Camas, Washington.

"I grew up in the Columbia River Gorge, one of the most beautiful parts of the world," Hayes tells *The Connection* during an interview at the Bullitt Foundation's Seattle office.

"My father worked in the paper mill that was kind of destroying the gorge, clear-cutting the forest that I hiked all around in as I was growing up," he recalls. "I woke up every single morning with a sore throat because of uncontrolled sulfur dioxide and hydrogen sulfide [from the mill]. Every now and then there'd be a major water-pollution excursion into the Columbia, and you'd look out and [see] thousands and thousands of dead fish. And I think imprinted in me at that point is that it must be possible to make paper, and, in fact, must be possible to have a fairly comfortable industrial civilization, without destroying the planet."

Hayes received an undergraduate degree in history from Stanford University and then headed off to the Kennedy School of Government at Harvard University. While there, a fortuitous situation resulted in his rise to national, and international, prominence.

"A senator from Wisconsin, Gaylord Nelson, was concerned with conservation issues," Hayes recalls. "He had seen how campus teach-ins on civil rights and on the war in Vietnam had created the scenes that ultimately grew into movements around those issues. And he thought that might make sense for environmental and conservation issues as well."

Nelson proposed an environmental teach-in on college campuses in April 1970.

"I had, by that time, decided that this was a field that I wanted to devote my career to," Hayes says. "So with the arrogance of youth I jumped on a plane, flew down to Washington, D.C., and got a 15-minute courtesy interview with the senator with the hopes of maybe getting the charter to go back and organize [the event at] Harvard."

The scope of his ambition at that point was to promote a local event at the college, but more was in store. That 15-minute interview lasted for a couple of hours, and led to the creation of Earth Day, beginning on April 22, 1970. Nelson asked Hayes to coordinate the events across the entire country.

NIC LEHOUX

NIC LEHOUX

BRENT SMITH FOR ROBIN CHELL DESIGN

"If this is what you want to do with your life, it was the opportunity of a lifetime," Hayes says. "We took it off college campuses, renamed it Earth Day, made it something which was clearly pro-environment, and it just took off like crazy."

An estimated 20 million participants embraced the event that year. "It was pivotal," says Hayes. "And in the immediate aftermath it created a political context within which Richard Nixon created the EPA [Environmental Protection Agency] with an executive order; Congress passed the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, the Endangered Species Act, the Marine Mammal Protection Act, the Environmental Education Act; on and on and on."

In the beginning, Earth Day was mostly a national event. In 1990, it went global. Today, 46 years after its creation, 192 countries celebrate our planet each year, on April 22. Although it's only once a year, it helps to create an awareness that lasts year-round.

Clockwise, from left: Denis Hayes; the Bullitt Center, which incorporates sustainable energy resources; the center's spartan lobby; and solar panels on the roof, which generate more electricity than the building uses.

Setting examples

While Hayes has stayed involved with Earth Day over the years, he's moved beyond it. He ran the nation's Solar Energy Research Institute under the Carter administration, worked for think tanks, taught engineering at Stanford and practiced law before being hired in 1992 as president of the Bullitt Foundation.

Started in 1952 by Dorothy Bullitt, a prominent Seattle businesswoman, the foundation's mission is "to safeguard the natural environment by promoting responsible human activities and sustainable communities in the Pacific Northwest."

Focusing on the Emerald Corridor—the region from Portland, Oregon, through

CONTINUED ON PAGE 34

Everyone's responsibility

DENIS HAYES OF the Bullitt Foundation says local governments, businesses and ordinary citizens can do their part to save the planet.

Be as efficient as you can possibly be. "That used to be a fundamental American value, and at some point along the line we began to take pride in our ability to waste energy, to buy gigantic sport utility vehicles that get 9 miles to the gallon as a source of pride, and this doesn't make any sense," Hayes says.

Local governments should update antiquated building codes and adopt green initiatives. Hayes points out that the Bullitt Foundation and the Bullitt Center's designers had to challenge existing ordinances to gain maximum efficiency: "We have, in Seattle, a Living Building ordinance that was pioneered to work for this building, but now it's out there and it's available for other buildings."

Businesses should invest more in efficient vehicles and other equipment, and build more efficient buildings. Hayes says, "It's manifestly in society's interest." He says the Bullitt Center does not have energy costs: "When you take the amount of electricity that's generated by our rooftop [solar panels] and the amount of money we receive from the utility for the metered saved energy, we actually run a profit."

For individuals, Hayes says, "recycling is a good place to start. If you're not sure which items are recyclable, contact your local utility. Many have free charts to post where you store your trash. Drive energy-efficient vehicles or, better yet, walk, ride a bicycle or take public transportation."

"Use LED light bulbs and buy Energy Star appliances," Hayes counsels. "Many local utilities offer rebates for designated products."—*SF*

© IADAMS / SHUTTERTOCK

Additional resources

For tips on living green, go to:

- *panda.org/how_you_can_help/live_green/out_shopping*
- *earthday.org/take-action*
- *content.sierraclub.org/green-tips*

ABOVE: NIC LEHOUX; RIGHT: © NEW YORK DAILY NEWS / GETTY IMAGES

BUILDING THE FUTURE

CONTINUED FROM PAGE 33

Seattle, to Vancouver, British Columbia—a metropolitan region with farms, forests, parks, fisheries and watersheds, the Bullitt Foundation is trying to create a model of sustainable development for the world, Hayes explains. "At this point, the whole world is rapidly becoming urbanized. We wanted to build in this area a model of what those cities could look like. Something where, if we succeed, people might come and study and say, 'Yeah, that's the kind of place that we would like to build, too. How did you do it?' "

Creating a living building

Toward that end, Hayes, and the foundation, in need of new headquarters, wanted to create an edifice that would embrace its principles of sustainability. Construction of the Bullitt Center (*bullittcenter.org*) began in July 2011.

"In building structures, there are a whole series of forces at play, none of which pushes sustainability as a really important factor," Hayes says. The world's leading architects create buildings that are intended to look stunning, he says, but pay little attention to functionality and efficiency, or how sustainable they are in a world of limited resources.

The Bullitt Foundation opted to invest in a six-story office building in Seattle that incorporates state-of-the-art sustainable energy resources throughout the structure.

"It is dramatically more efficient than anybody thought was possible, including our architects and engineers, and even me," says Hayes. "Our windows are all triple-paned, argon-filled, heat-mirrored, and they're designed in a way that goes right up to the ceiling … eliminating the need for artificial lights.

"It uses roughly one-ninth as much energy per square foot as the average building in Seattle. The amount of water that we use per square foot is about one-twentieth what the average office building uses in Seattle."

The building's toilets use a half cup of water mixed with biodegradable soap to foam the bowl per flush, creating safe, clean compost, which is ultimately sold as fertilizer in a program run by local government. Rainwater is captured, purified and stored. Solar panels form the roof, creating a self-contained energy source. Computers control automated blinds outside the windows, keeping heat from entering the building and eliminating the need for air conditioning. Hayes says that with all the design elements in place, it's not needed, even on the warmest days.

The building does not have a parking garage for automobiles, but it does have a room for bicycle storage and is on a major transit route. It is 100 percent free of toxic materials and uses "net zero" energy and water.

Hayes proudly notes that the Bullitt Center was built to last: "The design life is 250 years. That's not uncommon in Europe … but nobody builds buildings to last 250 years in the United States."

The Bullitt Center is the first office building in the world to achieve Living Building Certification from the Living Building Challenge, which Hayes explains is "a certification program, advocacy tool and philosophy that defines the most advanced measure of sustainability in the built environment possible today." He adds, "It's probably the greenest building in the world."

Hayes and the Bullitt Foundation are sending out a message: "We have the technology to power our future in ways that don't threaten our health or poison our planet. Let's choose to use it." Now it's up to the rest of us to act. C

Left: The Discovery Commons offers information about green building. Right: The first Earth Day, April 22, 1970, attracted 1 million participants in New York City alone.

Costco's approach

IN BUILDING AND running more than 700 warehouses and numerous depots around the world, Costco has adopted a sustainability policy that focuses on energy efficiency and environmental responsibility.

The policy covers building design, energy management, recycling and other areas, says Ali Moayeri, senior vice president of construction at Costco. "These practices are good not only for environmental reasons, they're good for business in that they save energy costs," he says.

Here are a few key examples.

- Where possible, Costco has followed an energy-saving metal warehouse design. These buildings meet or exceed local energy code requirements and use recycled steel materials in their construction and recycled asphalt in the parking lots.
- Large rooftop solar systems are in use in some 90 warehouses worldwide, and solar systems are incorporated in all new buildings where feasible. All new lighting is LED, including parking lots, while older buildings are being converted to LED. Also, each warehouse has about 250 skylights.
- Tons of trash that formerly went to landfills is now recycled into fertilizer, compost, feed stock and other products. Cardboard, shrink wrap and electronics all go into recycling programs.
- Numerous packages, such as milk cartons, have been redesigned to fit more items on a pallet, thus reducing truck trips to the warehouses.—*Tim Talevich*