

William McDonough

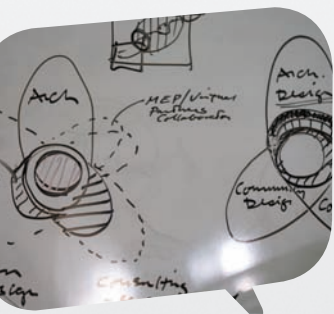
Highlight Video Transcript



Can the buildings where we live and work be grown from seeds?

William McDonough thinks so. His radically redesigned Ford Rouge Complex in Michigan is a model of green architecture and efficiency that features a living roof composed of real plants.

A leader in the field of sustainable design, William McDonough creates strategies for "environmentally intelligent" buildings. His constructions incorporate nature into design and feature daylight, fresh air, diversity, life and creativity. Learn about one of the fastest growing trends in the world's industry. Join William McDonough as he explains a future where "industrial design" and "environmental intelligence" are synonymous.



A leading advocate of sustainable architecture, William McDonough is more than a designer of environments. He is an environmental designer.

The legendary Ford Motor Company Rouge Complex, one of his notable projects, features the world's largest "living roof." It eloquently expresses McDonough's core philosophy: Waste nothing.

Like R. Buckminster Fuller, William McDonough never fights the forces of nature in his designs — he uses them. In doing so, he creates a harmony that endures.



Left: The sedum roof of the Dearborn Truck Plant. Bottom right: Workers planting the roof.
Top right: Worker with the famed Rouge smokestacks in the background.

William McDonough, Sustainable Architect

Designer of the Dearborn Truck Plant's "living roof",
visionary for the planet.

Waste nothing.

01:02:00; 08

I remember hearing the oxcarts come in at 2 o'clock in the morning to collect our sewage and take it out to the farmers. So we always knew that our waste went out to become food and soil. And so when the oxcarts came back in with the tofu and the vegetables and all the meats and things, you know, that was directly connected to our waste. That was the way it was. One thing's waste is another thing's food.

01:02:47; 10

Then coming to the States and seeing this world of abundance in contrast to the world of limits made me very sensitive to the fact of waste here in the Western culture. And so this development of a design strategy around waste equals food using the sun for power and — celebrating diversity — had a lot to do with the fact that I grew up overseas in different conditions.

Cradle to cradle.

01:12:38; 15

Well, I work with a — a philosophy we call cradle to cradle. And I've developed it with Dr. Michael Brownguard from Germany, who's a chemist. So you have an architect and a chemist. And the way we look at the world is design and chemistry. And so we say, "Wouldn't it be wonderful if everything that we designed was like a living thing where you could be happy that it's growing? Instead of being worried that it's getting bigger you're happy that it's getting bigger."

Further inspiration: R. Buckminster Fuller.

01:20:13; 13

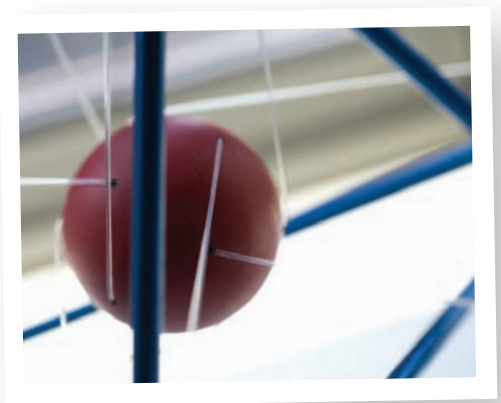
These are gifts I received from Thomas Zung, who was a partner of Buckminster Fuller. And what's interesting about this one is that — it's a — what he called a tensegrity structure. So it's — it's a compression and tension. And this — these struts are in compression. The cables are in tension. But they hold in tension a ball at the center of this tetrahedron. And so it identifies a single point in space held in tension, which is quite amazing when you think about it.



William McDonough.

"Wouldn't it be wonderful if everything that we designed was like a living thing where you could be happy that it's growing?"

— William McDonough



Closeup of a tensegrity sculpture in the office.

01:22:41; 17

He absolutely had a system. He — he was one of the first thinkers — from a design perspective — to go from the scale of the molecule to the scale of the galaxy and try and come up with a, sort of a unified design theory that could transcend, you know, dimension like that. . . . He dealt with something he called synergistics, which was how the whole world worked. And then he had his tensegrity in his — geodesics for the earthbound objects.

The Rouge project.

02:17:26; 05

We had done a green roof for The Gap for their corporate campus in San Bruno, California, which was a meadow of ancient grasses — beautiful roof but it was very heavy, because it was a real solid meadow with this much soil under it. So no one had really done a large-scale lightweight roof.

02:05:08; 18

I met Bill Ford and we went up to his office and looked out at the Rouge in the distance. And he asked me: “Do you think you can apply your ideas to that place?” And I remember thinking, “If we can’t, you know, we’re all dead, because this has to become a living thing instead of a dead and dirty thing.”

So we basically asked the question, “What are the principles that we’re gonna use to design this place?” And the quality workplace became the guiding principle. This is a quality workplace. And then the questions became things like quality soil, quality water, quality environments and so on. And once we had that, we could then set the goals.

02:09:35; 17

The board approved it in about a minute and a half — but it took a massive amount of hope and a massive amount of creativity, a massive amount of teamwork and . . . a heavy dose of leadership from Bill.

I think Bill Ford opened the door to innovation and said, “Innovate your way to the solutions that are cost-effective — that meet the green agenda, both in economic terms and in ecological terms.”



A wall of photos of McDonough + Partners' architecture projects.

“My advice to young people is to travel to get out and see the world. Because if you’re not open to the world, you won’t be able to imagine the kinds of solutions that are gonna be necessary.”

— William McDonough

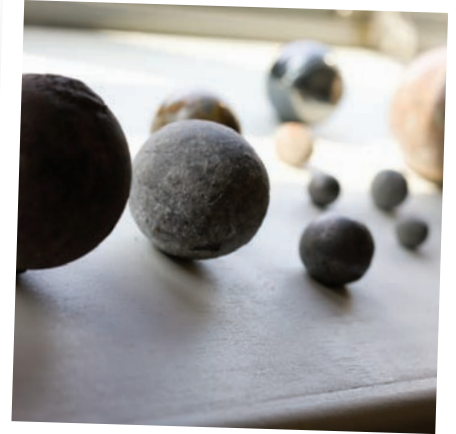


A view of the architectural office, workstations and models.

See the world.

03:14:46; 03

My advice to young people is to travel, to get out and see the world. Because if you're not open to the world, you won't be able to imagine the kinds of solutions that are gonna be necessary. And there may be an essay of clues out there for you, as an individual, that you could see by opening yourself to other cultures and other experiences. And I think that freedom that you're giving yourself by traveling is a really special gift of youth.



Inspirational objects in McDonough's office.

William McDonough has a lot more to say. Visit OnInnovation.com

to see his full, unedited interview, read the complete transcript and connect with other visionaries thinking out loud.



William McDonough in his office at William McDonough + Partners.