

MAGAZINE

How Top Designers, Architects, and Entrepreneurs Are Responding to Climate Change

Rethinking how we live and build, their latest green ideas lead the way

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In the face of climate change, top designers, architects, and entrepreneurs are rethinking how we live and build. Their latest green ideas lead the way...

Mix Pleasure With Business



PHOTO BY RASMUS HJORTSHØJ.

According to AD100 architect Bjarke Ingels, going green isn't just serious business—it can also be fun. In Copenhagen, the Danish wunderkind and his firm, BIG, recently completed a waste-treatment facility that converts trash into energy while also luring thrill seekers. Its 107,640-square-foot green roof doubles as a hiking trail and year-round

ski slope; a façade reveals a climbing wall; and two bars provide rooftop or après-ski libations. "The project is a crystal-clear example of hedonistic sustainability, the idea that a sustainable city is not only better for the environment, it is also more enjoyable for the lives of its citizens," says Ingels, who sees addressing the climate crisis as a design challenge, not simply a moral imperative. Though the plant does important work for its city, producing enough clean energy annually to power 150,000 local homes, it is also a public amenity, injecting both adventure and curiosity into the Danish capital. Says Ingels: "It makes me excited to see what ideas this summit may spark."

Hold Onto Your Seats

Reduce. Reuse. Recycle. Now sit back and relax. The most inventive new chairs transform plastic waste like single-use water bottles into sculptural perches for home or office.



On & On chair by Barber & Osgerby for Emeco; emeco.net. IMAGE COURTESY OF EMECO.



No2 Recycle chair by Nendo for Fritz Hansen; <u>fritzhansen.com</u> IMAGE COURTESY OF FRITZ HANSEN.



Vela chair by Calligaris; calligarisnyc.com. IMAGE COURTESY OF CALLIGARIS.

Totally Unplug



PHOTO BY MARCO PETRINI.

For urbanites, a country house can offer the ultimate escape. But a second home can also double your residential carbon footprint. As the effects of climate change become more immediate, experts are saying yes to less, designing high-style, completely off-the-grid homes that go beyond the tiny-house trope. Take, for example, the new

prototype (left) that architect Marc Thorpe devised as his own haven in upstate New York (edificeny.com). Just 500 square feet, the cedar-clad cabin is, as he puts it, "an exercise in reduction," and entirely self-sufficient. Solar panels provide electricity; a wood-burning stove heats and cooks; and rainwater is collected and reused.

Customizable for clients, the simple abode provides all the necessities. Says Thorpe:

"We, as architects, have an opportunity now to start a movement toward less."

Sleep On It

When it comes to a good night's rest, it's not just quantity, it's quality. With the health of our planet in mind, pioneering companies are rethinking the staples of slumber—from Buffy's eco-friendly eucalyptus sheets, comforters, and pillows to Avocado's allorganic mattresses and bedding. Because you don't want to lay your head just anywhere....

Check In



PHOTO BY BRICE FERRÉ STUDIO.

Before COVID-19, the climate crisis was already changing how we travel, as conscientious jet-setters forwent planes or offset trips by supporting programs to reduce greenhouse-gas emissions. But to invert the adage, it's not just about the

journey—it's about the destination. Today's

most enticing hotels are doing their part to be greener. Take the new Nayara Tented Camp in Costa Rica (right), which created a reserve for local sloths

Sossusvlei Desert Lodge in Namibia, now updated with solar panels and a water-recycling plant (andbeyond.com). If the eye has to travel, it must do so with sharper

(nayaratentedcamp.com); or and Beyond

Get Scrappy

vision.



Bethan gray lounge chair, made using otherwise discarded pheasant feathers; <u>bethangray.com</u>. IMAGE COURTESY OF THE COMPANY.



Granby Workshop plate, made using ceramic waste; granbyworkshop.co.uk. IMAGE COURTESY OF THE COMPANY.



Scrap-denim composite by Sophie Rowley; sophierowley.com. PHOTO BY FABIO DI CARLO.

Denim snippets, cast-off feathers, even clay sludge—one person's trash has literally become another's treasure, thanks to a bold generation of designers developing new materials from old waste.

Knock on Wood



RENDERING BY MIR.

Though it may seem like a throwback to yesteryear, wood construction is now being heralded as the building method of the future, as experts deploy prefabricated, cross-laminated timber planks for everything from mixed-use towers to single-family homes. Embraced for its low carbon footprint, the material is not only easily replenishable (when harvested from sustainably managed forests) but also firesafe (because it burns slowly and predictably). Notably, Zaha Hadid Architects has received permission to erect the first alltimber stadium, a sinuous, 5,000-seat soccer arena in Gloucestershire, England (pictured). What's old is new again.

Cement Your Ideas



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According to recent studies, buildings and their construction produce some 40 percent of the world's greenhouse gases, and cement is the main offender, releasing one metric ton of carbon dioxide for every metric ton produced. In a high-rise, that stacks up to a lot of pollution. But a novel system may be the key to tomorrow's towers. Designed by the global architecture firm Skidmore, Owings & Merrill, Stereoform Slab debuted

at the 2019 Chicago Architecture Biennial in the form of an undulating 70-foot- long pavilion. The engineering feat uses 20 percent less concrete than traditional construction but maintains the same strength. "Material savings is key," says SOM partner Scott Duncan, whose team used robotic formwork to determine the efficient shape. "It's a matter of using our resources more intelligently."

Learn the Term

Talk to today's savviest sustainability experts, and the words you're most likely to hear are embodied energy. Offering a holistic view of a carbon footprint, the phrase refers to the total energy required to realize a building, including not only the extraction and manufacture of its materials but also their shipment to site and continued maintenance.