An End to Laundry?
The Promise of Self-Cleaning Fabric

Scientists found a way to remove stains from fabric in the lab, using sunlight and tiny particles of silver and copper

Scientists in Australia, one of the sunniest places on the planet, have discovered a way to rid clothes of stubborn stains by exposing them to sunlight, potentially replacing doing the laundry. Working in a laboratory, the researchers embedded minute flecks of silver and copper—invisible to the naked eye—within cotton fabric. When exposed to light, the tiny metal particles, or nanostructures, released bursts of energy that degraded any organic matter on the fabric in as little as six minutes, said Rajesh Ramanathan, a postdoctoral fellow at RMIT University, in Melbourne.

The development, reported recently in the journal Advanced Materials Interfaces, represents an early stage of research into nano-enhanced fabrics that have the ability to clean themselves, Dr. Ramanathan said. The tiny metal particles don’t change the look or feel of the fabric. They also stay on the surface of the garment even when it is rinsed in water, meaning they can be used over and over on new grime, he said.

“There’s more work to do before we can start throwing out our washing machines, but this advance lays a strong foundation for the future development of fully self-cleaning textiles,” Dr. Ramanathan said. Separate research is under way to test what effect the nano-enhanced fabrics have on germs and whether they are capable of killing superbugs, which resist traditional antibacterial treatments. So far, the team of scientists from the Ian Potter NanoBioSensing Facility, part of RMIT University, have tested the nano-enhanced fabrics using organic dyes and artificial light in the laboratory. The next step is to run experiments with real-world stains such as ketchup and wine, and to see how long it takes the grime to degrade in natural sunlight. The researchers also want to test if the nanostructures remove offensive odors, Dr. Ramanathan said.

Christopher Sumby, an associate professor in chemistry and physics at the University of Adelaide, who wasn’t involved in the research, said there were interesting aspects to the work from a chemistry perspective. However, the particles haven’t been tested in real-world situations. “It is a bit of a stretch to talk about self-cleaning fabrics at this stage,” he said.

An advantage to the technique is that copper and silver are commonly used as catalysts in the chemical industry and are relatively cheap. The research team needed to figure out how to build the nanostructures in sufficient quantity and how to permanently attach them to textiles. Their approach was to grow the nanostructures directly onto the textiles by dipping them in a few solutions, a process that took about 30 minutes.

Cotton has a natural, three-dimensional structure that helps the nanostructures attach themselves and absorb light, which in turn speeds up the process of degrading organic matter, Dr. Ramanathan said. The researchers also found the technique worked well at removing organic matter from other fabrics such as polyester and nylon.

Dr. Ramanathan said the team has been approached by various industries, including textile makers. To commercialize the development, the researchers would need to ensure the nanostructures were stable enough to comply with industry standards for clothing and textile products, he said.

Solving the Perfect-Mattress Puzzle

Shopping for a new mattress is, for many, a Goldilocks-like adventure: You head into a showroom to briefly lie on various models, before coming to a conclusion about each. “This one is too hard,” you might say. “And this one is too soft.” Though Goldilocks found her happy medium after just two tries, the rest of us are rarely so lucky, flopping down again and again in search of our ideal.

But a few mattress makers—like Helix Sleep, Reverie and ReST—are attempting to let you bypass the needle-in-a-haystack search. Their products can be customized to your body type and favorite sleep position—in some cases adjusting themselves while you slumber.

Not to be confused with mechanically controlled, articulated frames like that of the Craftmatic Adjustable Bed, these mattresses are ready to plop onto your baroque four poster, minimalist platform or vintage sleigh bed. All of the customization happens on the inside, with manufacturers tweaking the feel using everything from rearrangeable foam cylinders to air chambers that expand and contract.

Why go to such lengths? One reason, according to Helix Sleep co-founder Adam Tishman, is that a single mattress is often imperfectly suited to two people. Among Helix Sleep’s customers, 73% of women are side sleepers whereas only 52% of men are. By going the custom route, you can make each side different.

We did the surprisingly tiring work of testing customizable mattresses at home and in showrooms. Perhaps one of the below will be “just right” for you.

For Tailored-to-You Convenience: Helix Sleep

Buying a mattress from Helix Sleep begins with you and your bedmate filling out a questionnaire on the company’s website. Along with providing your height, weight, age range, body shape (are your shoulders wider than your waist and...
hips?) and health issues (specifying whether you suffer from any aches or medical conditions), you’ll be asked to answer somewhat more intimate questions like, “Do you get hot at night?”

Helix Sleep then analyzes your answers and generates a recipe for your mattress, customizing the firmness and the order of various foam, latex and coil layers, which are then assembled at the company’s factory outside of Chicago. If a couple’s needs are similar, Helix Sleep will recommend a mattress with “blended” characteristics, based on their answers. Or, for a $100 upcharge, each side of the mattress can be tailored to its occupant’s exact specifications. The mattress we tested was a little firmer than expected, based on our answers, but was a marked improvement over our existing mattress. Should it have been uncomfortably firm, Helix Sleep would have sent out a softer topper to change the feel. We could also have taken advantage of the company’s 100-night return policy, which includes free pick-up of the unwanted mattress. From $900 for a queen mattress, helixsleep.com.

For DIY Customization: Reverie
Because even a perfectly customized bed can become uncomfortable in the event of a change to your body (like an injury or pregnancy), Reverie gives you a cleverly low-tech way to change how your mattress supports you. Unzip the cover and you’ll find a multicolored grid of latex foam barrels. The yellow ones are firm; greens are medium; blues, soft; and pinks, extra soft.

Whether you order a Reverie mattress in a soft, medium or firm configuration, the assortment of cells is always the same; the arrangement of those cells is what changes how the bed feels. (Color-coded plans for softer or harder configurations can be downloaded from the website.)

Our worry that the juxtaposition of soft and firm cells would lead to a lumpy feel was unfounded. Each side of the bed lived up to its billing, and the padded cover blurred the differences among cells without negating their character. $3,799 for a Dream Supreme queen, reverie.com.

For Real-Time Response: ReST Bed
When we first laid down on the ReST Bed, it felt like any other reasonably comfortable mattress. But a look at the Samsung Galaxy tablet that comes with the mattress showed trouble brewing. On the screen, a real-time display generated a body map, with larger, brighter circles indicating pressure hot spots. (Roll to your side, and you’ll see the area around your hips and shoulders bloom.) The information sent to the tablet comes from a pressure-sensing sheet of Lycra that sits between the mattress topper and the inflatable air chambers below it.

Of course, knowing you’ve rolled over and increased pressure on your hips is interesting but useless while you’re sleeping. So the ReST Bed does something about it. Those sensors talk to a shoebox-sized compressor beneath each side of the bed that automatically balances the air pressure below your head, shoulders, lumbar region, hips and feet, adjusting the mattress to your position while you sleep. The adjustments are implemented subtly and slowly so the motion doesn’t wake you up and the compressor runs quietly. (It was no louder than an aquarium pump or the whir of a ceiling fan.) And if you’d rather not have the mattress moving automatically, you can use the tablet to set each chamber to your desired level of firmness.

The software that controls the app is continually updated, according to the manufacturer. Soon, for example, owners will be able to play back a “sleep movie,” tracking not just how they slept, but in what position. $7,999 for a queen, restperformance.com.

Mattress Makers Unroll New Sales Approach

Mattresses were long considered immune to the e-commerce boom. For decades, they have been sold in showrooms full of dozens of styles with dizzying discounts and high-pressure salespeople. But a new breed of upstarts with slick websites has cracked into the $14 billion US mattress industry. The online sellers offer just a few varieties at fixed prices—and ship free to customers’ doors—a foam mattress that is compressed into a box the size of a large suitcase.

Industry incumbents aren’t taking the new challenge without a fight. Tempur Sealy International Inc., the world’s largest mattress manufacturer, will start selling its own bed in a box, called Cocoon by Sealy. It will be sold at fixed prices—$549 to $999 depending on size—through a dedicated website. It comes in two models: soft or firm.

Casper Sleep Inc., sells one type of mattress. The size determines the price, from $500 for twin to $950 for king. These customers choose simplicity and convenience over coil counts and pillow tops. The company generated $100 million in sales last year, its first full year of operation.

Casper and other newer companies, such as Leesa Sleep and Yogabed, have designed sites tailored for smartphones that require a few clicks to order. In place of the salespeople. But a new breed of upstarts with slick websites have designed sites tailored for smartphones that require a few clicks to order. In place of the chance to try out a $5,000 Tempur-Pedic with adjustable base or lie down on a $2,500 Serta iComfort with gel memory foam, they promise free shipping, 100-day guarantees and free returns. It is a process aimed at the often wealthier, younger and busy shoppers who care less about kicking the tires and more about convenience. Many customers feel that online reviews are enough quality control.

Compressed mattresses promise high margins because they are cheaper to ship than inner spring mattresses than can’t be compressed. Because of the way carriers like FedEx and UPS charge, delivering a 90-lb compressed mattress is less expensive than home delivery with a regular truck.


THE INCREDIBLE SHRINKING HOTEL ROOM

Young travelers get the social experience—and somewhere to crash

Hotels are thinking big by going as small as they can. Independent hoteliers to big-name brands like Marriott are getting into the “micro-hotel” trend. The hotels have tiny rooms—think as small as 50 square feet—but big public spaces that appeal to social travelers.

"It is a slightly literal example of the 'living like a local' trend — where an apartment is often just a place to sleep, and the..."
Born says. “The rooms are very well thought-out, meaning design of the room and avail themselves of the technology,” designed for intelligent people who understand the quality of made for airplanes. Cubby holes provide storage space. “It’s each with their own plugs and TVs with headsets that were largest is 200 square feet. Some rooms have bunk beds, York normally cost. The smallest room is 72 square feet. The Rates start at $89, a mere fraction of what hotel rooms in New hostel,” Born says.

when we built it was the very next stage after you build a youth garden area and weekly happy hours. “My target audience or more young locals as guests. Pod 51 has an outdoor Taco restaurant that on an early Friday evening drew as many guests can engage in ping pong matches and a Salvation 2012 with a rooftop lounge, a communal play room where the debut of Pod 51 in Midtown East. Pod 39 opened in June introduced the micro-hotel trend to New York City in 2007 with Pod Hotels:

Here’s what we found.

USA TODAY took a look at a few micro-hotels in New York. There are five European properties in each has a king-sized bed that is about 6’6’’ long. Rates start complimentary. All rooms at CitizenM are 170 square feet, and each has a king-sized bed that is about 6’6’’ long. Rates start there’s a space to put your bag, there’s a space to put your things, there’s a plug wherever you want to plug in your device.”

The Jane: Once home to survivors of the Titanic, this hotel in the West Village feels more like a cruise ship or a train with sleeper cabins. Rooms have single beds or bunk beds. In the rooms with bunk beds, “there’s two of everything: two TVs, two waters, two bathrobes, two pair of slippers,” says Courtney Garron, a manager at the hotel. Guests staying in the smallest room, the 50-square-foot Standard Cabin, share communal bathrooms.

There are built-in drawers and a luggage rack, but Garron acknowledges that sometimes people traveling with too much run out of space. “We hold people’s bags,” she says. The Standard and Bunk Cabins are 7’ long and the beds are around 6’ long, large enough for an average-sized person but perhaps a tight fit for someone taller.

Larger Captain’s Cabins with their own bathrooms are available as well. And with prices starting at $99 a night, upgrading to the larger cabin would still run you less than a regular hotel nearby. An historic ballroom with a bar, lounge and mezzanine plus a rooftop with views of the Hudson River provide entertainment for those who want to get out of their rooms.

Yotel: In addition to the Yotel New York, travelers can try out this micro-hotel in London’s Heathrow and Gatwick airports. Expansion plans are in the works for Boston, Brooklyn, San Francisco, Miami, Dubai and Singapore. The smallest room, found at the airport locations, is 75 square feet. Rates at the New York location average around $200. Travelers can book at the airport locations in four-hour blocks. With rooms that small, some features have to be customized. Yotel recently introduced the adjustable “SmartBed by YOTEL” created in partnership with Serta. Think of a Barcalounger for beds. Guests can convert the bed into a sofa for TV watching or working on their laptops.

Having trouble sleeping? The Yotel channel broadcasts a “Yawn” video to help induce sleep. The bizarre video of a man yawning is effective at making viewers want to close their eyes. And in a nod to how important technology is to the modern-day traveler, the Yotel New York has a YOBOT on full display. The automated luggage storage and retrieval facility provides entertainment while taking care of luggage.

CitizenM: Rooms at CitizenM in Manhattan’s Theater District feature interesting technology such as a digital artwork display that lets guests select whichever contemporary piece of art at which they choose to stare.

Samsung touch-screen MoodPads control the TV, music, window blinds, temperature and alarm. Wi-Fi is complimentary. All rooms at CitizenM are 170 square feet, and each has a king-sized bed that is about 6’6” long. Rates start at $199 in New York. There are five European properties in addition to the New York CitizenM. Plans are in the works to open more in the UK, France, Taiwan and USA.

“Our travelers appreciate an inspiring environment, a place
where they really connect to the atmosphere, a great sleep experience . . . without having to pay the high rates of a typical boutique hotel," says Noreen Chadha, commercial director, USA, for CitizenM. Yet the New York property has the vibe of a boutique hotel. A hip bar plays curated music. A shop features books by Mendo, a popular Dutch store. And a rooftop bar called Cloud Bar has a fireplace and outdoor terrace. For now, it's only open to guests.

**Moxy:** Marriott’s brand for Millennials debuted in September 2014 with the opening of the Moxy Milan. More than 150 properties will be added to the collection in the next 10 years.

What can guests expect when Moxy finally arrives in the USA next year? Public spaces with four zones: a welcome area, library and plug-in area, food and beverage outlets and lounges. Bedrooms, on average 186 square feet, have an open storage concept with a peg wall. A platform bed has "underbed" motion sensor lighting. The bathroom has a one-compartment layout with a shower and vanity.

There’s free Wi-Fi and keyless entry with your mobile phone. Guests can buy food at Moxy’s 24/7 self-service station. The bar is full-service. The Guestbook is a digital platform that collects stories, pictures, and videos from travelers. They are broadcast on the website, Instagram and on hotel screens.

**tommie:** Commune Hotels and Resorts’ first tommie will open in New York’s Hudson Square. A second property will open in the city’s NoMad neighborhood.

Rooms will have multi-functional furnishings such as a convertible flip-down desk, an open closet and an alcove bed perched against the window. "It’s a micro lifestyle hotel," says Niki Leondakis, CEO of Commune Hotels and Resorts, which also runs the luxury lifestyle Thompson Hotels. "Every square foot is thoughtful."

The hotel will have a General Store where guests can find items for free or for purchase such as toiletries, games, clothing and food and drinks. There will also be a bar and a restaurant. "It's really experiential," Leondakis says. "You don't have anything that is in excess. It's not cluttered."

Bedbug Battles

Australian researchers say the reason the bedbug population is exploding around the world could be because the biting insects are evolving to have thicker skins that make it harder to kill them with insecticides.

A team from the University of Sydney says that the thicker skins may mean it takes 1,000 times more concentrated insecticides to get rid of the pests. The most effective and proven non-toxic way to eradicate an infestation through the use of very high heat.

**BUGGED**

The hotel guest can bring unwanted hitchhikers along in their luggage. Recent outbreaks of bedbugs in major cities in Canada have put enormous strain on the hotels involved. There are steps that help limit the risk. At Hotel Le Crystal, a five-star boutique hotel in Montreal, pillow covers, duvet covers for the blanket between the second and third sheets in a triple-sheeting sequence, and mattress covers are made of silk since bed-bug larvae cannot adhere to silk.

Providing a luggage rack for the suitcase limits contact with the carpet and bed. At Starwood Hotels and Resorts, proactive inspections are performed by housekeeping teams on a daily basis with "unwavering vigilance," says Cynthia Bond, public relations and partnerships at Starwood. "In addition, our properties retain independent pest-control experts to perform thorough checks on a regular basis throughout the properties."

**Airbnb upends Tourism**

*How online travel platforms will affect residents*

Sharing apps that enable travelers to book stays in private homes are changing not only the nature of urban tourism, but the cities themselves—for better and for worse.

In many cities, the surging popularity of services like Airbnb that let homeowners turn their properties into vacation rentals is bringing tourists into neighborhoods they never visited before, experts studying the issue say. New revenue and revival can come into poorer areas as a result.

But in some of these neighborhoods, there can be an unfortunate side effect: An influx of tourists, and the money they bring, can lead to higher rents and retail prices, and the displacement of locals who can no longer afford to live there. As this continues, experts say that cities will need to find ways to better manage tourism so that they can preserve their unique cultures while staying open to the world.

**Effects of sharing:** Not only online booking apps, but restaurant-review sites and ride-sharing services have made cities around the world accessible to visitors like never before, penetrating far beyond traditional tourist neighborhoods, often in areas long associated with blight.

Sofia Ranchordás, a resident fellow at Yale Law School who researches regulations in the sharing economy, says "Travel platforms are really positive for the development of tourism. You have more choice and more experiences, but for locals it’s not positive at all."

Rachel Hatch, research director at the Institute for the Future, a non-profit based in Palo Alto, CA, and a regular Airbnb host herself, adds "If I were to forecast it for the next decade, cities that will thrive will be the ones that pause to consider how to leverage their sharing economy, while preventing gentrification and leveraging the city’s character."

A 2015 study by a Free University of Berlin graduate student, Kestin Bock, picks up on that theme. In her research about the changing nature of tourism and its implications for cities, Ms. Bock says she found that as city tourism has increased, the boundaries between locals and tourists have blurred. Visitors often opt for longer stays and get online tips about neighborhood bars and cafes. Also, neighborhoods are seeing prices rise as the tourists fuel demand for more expensive restaurants.

"Museumization": Some neighborhoods have been almost taken over by tourists in a process known as “museumization,” Ms. Bock says in her study. She adds that she sees this as a sign that better tourism management—both on the ground
and online—will be required if the rapid rise in city tourism continues.

To handle the expected increase in traffic, Ms. Bock believes that cities in the future should develop online platforms that locals and tourists can use to connect with each other and with businesses, as well as technological platforms that locals and tourists can use to connect with each other and with businesses, as well as technological platforms cities can use to manage visitor and traffic flows.

“By using technologies to increase sustainability and quality of life for residents, cities will also become more attractive to tourists,” Ms. Bock says.

Meantime, Airbnb says it is aware of the concerns of residents in neighborhoods with high numbers of hosts. Company spokesman Nick Papas says, “We’ve heard from countless people who love sharing their unique neighborhood and can only afford their city because they share their home. We want to be a good neighbor and we work diligently to address any issues that come up.”


A Short-Circuit Story
A look back at the hospitality industry’s best innovations—and a few clunkers

1859: Rather than climbing the stairs, guests of the Fifth Avenue Hotel in New York took a “vertical railroad” to their floors. The compartment, a precursor to the elevator, was not hoisted by cable, but instead lifted and lowered by a massive 90-foot-long screw turned by a steam engine in the basement.

1888: The Ponce de León Hotel in St. Petersburg, FL, offered the then-cutting-edge amenity of electric lights in each room. Extra staff were hired to operate light switches for nervous guests.

1897: The 17-story Waldorf Astoria in New York replaced messenger boys with a pneumatic tube system, which sped the delivery of as many as 10,000 newspapers, messages and calling cards a day to hotel guests’ floors.

1906: In what might be the first promise of hotel Wi-Fi, the Hotel Belmont in New York claimed to be the only hostelry in the world with an on-site wireless telegraph station, necessary for sending and receiving messages to and from ships at sea.

1947: The Roosevelt Hotel in New York became the first hotel to install televisions in its guest rooms, a rare and luxurious amenity. At the time, only about 16,000 televisions were in American households.

1973: The Sheraton Plaza in Atlanta, GA, introduced in-room movies. Engineers were required to cue the tapes.

1979: After a series of room thefts, the Westin Peachtree Plaza in Atlanta, GA, installed recodable electronic door locks with keycard entry. Early versions used a pattern of punched holes rather than a magnetic strip.

1990: Ursula, a 6’4" robot (think Grace Jones meets the robot in Fritz Lang’s “Metropolis”) showed guests around the $25,000-a-night Galactic Fantasy Suite of Carnival’s Crystal Palace Resort & Casino in Nassau, Bahamas.

1996: The Nob Hill Lambourne hotel in San Francisco was the first hotel to offer guests Internet access in every room, and the use of a Toshiba laptop with not-quite-blisteringly fast 28.8kbs modems.

2008: The Sax Hotel in Chicago lent guests Microsoft Zune MP3 players rather than iPods. The hotel has since closed.

2013: The Kitano Hotel in New York installed, in every guest bathroom, a Toto Washlet, the Japanese heated toilet seat that gives a deluxe undercarriage wash (and dry).

2016: The Arcade Hotel opened in Amsterdam’s trendy De Pijp neighborhood in January of this year, offering its guests rentals of a variety of classic videogame consoles, such as an Atari 2600 and a Nintendo GameCube with a comprehensive library of game titles.

A Short-Circuit Story, The Wall Street Journal, April 30-May 1, 2016

ROOF TOP GARDENING

The kitchen of the 1,544-room Hilton Chicago Hotel is a rare place in the hospitality industry. Here the average tenure, according to chef Mario Garcia, is around 14 years. Garcia himself has worked at the hotel for 20 years. An ongoing initiative that began last year, however, welcomes some new rotating workers: two interns to help manage the property’s roof gardens.

The students come from the Chicago Botanic Garden’s Windy City Harvest (WCH) program, which offers a nine-month certificate program and apprenticeship in sustainable horticulture and urban agriculture to those enrolled at the City Colleges of Chicago’s Daley College satellite campus, the Arturo Velasquez Institute.

Typical students are those looking to change careers, young people with a history of incarceration and those with other barriers to employment who are seeking better options.

The Hilton Chicago’s partnership with WCH started in 2014, when the hotel began purchasing produce from the program’s farms, which comprise 11 facilities including the rooftop of McCormick Place, the city’s big convention center, atop which 20,000 square feet are devoted to plantings. During the summer, about 40% of the hotel’s lettuce comes from WCH.

“When I was introduced to the program, the first thing we did was work with them at one of their farms,” says chef Garcia. “Last spring they were producing some really tasty misuna lettuce. We probably bought about 200 pounds a week.”

A hotel-internship trial started about the same time. “We asked if the interns could work with us on our rooftop garden; they were our gardeners for 2015. It worked very well; they had a very good work ethic."

The roof garden had a good year in 2015, producing tomatoes
and a lot of herbs, such as mint, rosemary, basil, lemon balm, arugula, thyme, sage, oregano, marjoram, chives and parsley. "We also had microgreens—they have a very quick turnaround. It was a constant rotation and it worked very well," says Garcia. "We also added two beehives that the interns were responsible for handling. We got a little bit more than three gallons of honey, very good for our first time. We packaged them in little jars and gave them as gifts, and also used it for special menus.

Work for this year is starting now thanks to temperate weather. Garcia plans to expand the garden beyond the 85 containers seeded last year "We’re going to use at least another 40 planters and have two more beehives for a total of four; we likely will still have two gardeners.

Examples of how the produce has been used include an appetizer with local cheese on Windy City farm greens; and arugula and mustard greens with mozzarella, little tomatoes and a simple vinaigrette. For a main course, short ribs have been served with pureed carrots, roasted beets, peppers and vegetable ingredients, all picked at the farm.

Garcia loves how engaged guests are with the program. "We posted in the lobby that we have a rooftop garden and people are very interested in seeing it and walking through it," he says. "This is going to be our fifth year, and the interest from guests to find out how we make it work has been the biggest surprise."

WCH is not the only source Garcia uses, because his needs are so large. "When the growing season starts, there are several farmers around that we have begun to work with," he says. "There are weeks that I’ll use 500 pounds of asparagus.

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How companies can save money with bolder water goals

With water scarcity risks increasingly affecting the global economy, businesses would be well-served to recalibrate their approach to the issue.

The private sector is starting to feel the pain of the global water crisis. Last year, the World Economic Forum ranked water crises as the most damaging short-term risk, and this year as the top global risk to industry and society over the next decade.

In 2015 alone, 27% of companies disclosing to CDP Water reported detrimental water-related business impacts, including loss of revenue, increased capital expenditure and decreasing profits, to name a few.

At the Paris climate summit in December, 114 multinational companies joined together in committing to use the best science as the basis for setting greenhouse gas emissions reduction targets. Targets informed by science might well be effective in reducing risks posed by water as well.

However, there is no consensus on the best way to set targets for water that help reduce business risk. Three major hurdles stand in the way:

1. Location matters. In the case of greenhouse gas emissions, the effects on the atmosphere are the same regardless of their location, and therefore so are targets. Where water is used and discharged is critical to determining the associated risks and threats to water availability, creating the need for location-specific targets across a value chain.

2. Challenges are multifaceted. Unlike impacts on climate, which are driven largely by greenhouse gas emissions, the water crisis stems from an intertwined fabric of challenges —water scarcity, floods, droughts, declining water quality, impacts on human rights and ecosystem loss—that make it one of the largest threats to our economy, society and the environment.

3. No scientific call to action. While there is an international call to action to limit global warming to less than 2 degrees Celsius by 2100 to avoid the worst effects of a changing climate, no such world-spanning vision exists for water.

Building better goals

So far, corporations have set water targets that are the same from one region to the next, driven by industry benchmarking and what can be achieved—not what needs to be achieved —through incremental improvements in efficiency, the deployment of existing technology and investments in NGO partnerships.

While these targets are a step in the right direction, they could fall short without further insight into what is actually needed in each watershed and aquifer, and thus fail to reduce long-term water-related business risks.

But times are changing, and with the growing global appetite for meaningful targets to reduce emissions comes increased interest in setting water targets that help solve the world’s water challenges and mitigate business risks.

For example, World Resources Institute has been working with Mars Inc., the privately held multinational food producer, to develop a conceptual approach for setting water targets informed by science, and measuring impacts and tracking performance over time. The approach aims to overcome the hurdles described above, by being:

1. Location-specific. Targets should be set for each location across a value chain, from raw material sourcing to manufacturing and consumer product use, driven by the unique watershed and aquifer conditions and allowing for prioritization based on location-specific impacts and risks.

2. Focused on key challenges. An ecosystem of metrics and indicators could help set targets and measure progress across all impact categories, including water quantity, water quality, human rights and water-related ecosystems, while allowing companies to track progress with a single enterprise-wide metric.

3. Informed by the best science. The level of ambition for water targets should align with existing water policy targets and goals in each watershed, and be informed by the company’s share of responsibility in reversing water impacts. The latest science can help support that calculation and a growing body of literature is available to inform the magnitude of change required to collectively ensure long-term water.
availability in every watershed and aquifer around the globe.

For this approach to succeed, companies will have to engage other water users across sectors, because reducing impacts from only one company within a watershed will do little to lessen water challenges and business risk. Put simply, companies can’t afford to be clean fish in a dirty pond; they need a clean pond to survive.

Despite skepticism about this kind of collaborative strategy, ecosystems, governments and communities might have more to gain from positive, meaningful action from corporations than from having them remain indifferent, or worse, simply pack their bags and leave.

At this point, companies have had to rely on limited information and a lack of consensus when setting targets to deal with growing water risks. As corporate aspirations shift from what can be done to what needs to be done, setting water targets informed by science promises a new opportunity to reduce business risks, support the global development agenda and ensure long-term water availability.

How Does Your Linen Stack UP?

Upscale linens come in many permutations, but the ultimate test of their quality is in the laundry room. In the average hotel there is only one laundry system, and linens should be designed to withstand the stress of multiple washes regardless of their price point.

“The luxury client lives a luxury lifestyle,” said Stacy Garcia, CEO of Stacy Garcia Inc. According to Garcia, guests with a greater expectation for high-quality linens will expect the linens to hold their shape, regardless of the washes they have gone through.

Laundry services have been using more environmentally friendly chemicals in the washing process to help sheets last longer, resulting in an opportunity for hotels to purchase higher quality sheets. “It can get a bit mathematical,” said Jason Needleman, CEO of Peacock Alley. “Better yarns of cotton last longer and shrink less. With less shrinking there is less usage per square inch applied in the day-to-day service of the linens. This all goes toward minimizing expenses while maximizing potential quality.”

Small amounts of shrinkage may appear unimportant, but on high-quality linens it can be a drain on resources. The majority of hotels have only one laundry system for linens that doesn’t discriminate between textiles for average guestrooms and high quality sheets in suites. If high-quality textiles are treated the same as those at a lower quality, the losses can be much greater when shrinking and fading begin to occur.

Higher quality yarn is more resistant to shrinking, allowing these linens to last longer.

Needleman says that hotels are doing themselves a disservice by not involving themselves further into the investigation of their linens. “Textiles are the number one ongoing expense for hotels,” Needleman said. “Most GMs don’t want to manage them because textiles are a tedious thing to watch, and it gets delegated to other departments such as the cleaning services which leads to it being overlooked.”

Vegas Fights to Buy its Own Juice

Three big casino companies that run glittering resorts on the Las Vegas Strip are trying to break free from Nevada’s electric power monopoly, NV Energy. Hoteliers including Wynn Resorts Ltd., MGM Resorts International and Las Vegas Sands Corp., which operate more than a dozen massive gambling palaces in Nevada, say they could cut millions of dollars from their electric bills if they could buy power directly from solar farms or power-plant owners. But NV Energy, which is owned by Warren Buffett’s Berkshire Hathaway Inc., is pushing state regulators to make it very expensive for the casinos to stop buying its power.

The same struggle is occurring across the country as large power users watch wholesale energy prices fall while their utility bills rise. New York, Texas and 11 other states allow residents and businesses to buy their electricity from competitive suppliers, but Nevada is among the majority of states that require most customers to buy power from monopoly utilities. The fight is particularly acute in Vegas, where keeping the bright lights of the Strip shining—and creating permanent daylight indoors so the gambling never stops—requires a lot of juice.

Data from MGM Resorts International show that its Las Vegas properties, including the Bellagio and Mandalay Bay, use more electricity than Key West, FL, a tourist destination with more than 2.5 million visitors each year. According to the commission, the three casino owners challenging the power utility account for more than 5% of the electricity sales of NV Energy, which generates power and also buys it from other companies.

The casinos say they would like to use more renewable energy to live up to commitments they have made to shareholders and customers. Many other large companies, including Wal-Mart Stores Inc. and General Motors Co., have joined together to push for better access to renewables, but say some utilities are charging too high a premium for it.

Casinos say that is part of what is going on in Nevada. After Berkshire bought NV Energy in December 2013, the utility signed long-term contracts to buy solar power for as little as 3.9 cents a kilowatt-hour from First Solar Inc. and SunPower Corp. Wholesale conventional power is even cheaper, going for an average of 3.5 cents a kilowatt-hour at a hub in southern California, where Nevada gets some of its power. That is down 34% from 2014, and 57% below 2008 prices. The company charges the casinos and other big commercial clients between nine and 10 cents a kilowatt-hour for a mix of conventional and renewable power.

Matt Maddox, president of Wynn Resorts, calls the markups excessive. Wynn could cut its power costs by as much as 40%, or $7 million a year, by purchasing electricity directly from energy suppliers, Mr. Maddox said, adding he can’t
see why the resort should be forced to buy power from NV Energy when the utility is doing little to keep costs down for its consumers. "They are over-earning and not passing on savings," he said.

Las Vegas Sands wants to buy more renewable power as part of an effort to cut its energy use and be more environmentally responsible, but the company can't reach its goals without more buying options, said Rob Goldstein, the company's president and chief operating officer.

So far, state regulators are taking the utility's side. Despite a 2001 law that allows large energy users to switch power suppliers, the Public Utilities Commission of Nevada has never granted customers permission to leave the Las Vegas utility. A commission spokesman declined to comment. But when a large data-storage company tried to leave the utility last year, regulators said that the departure of a big customer was unacceptable because other customers' bills would rise sharply to make up for the loss of revenue.

In the current case, the commission has proposed that the casinos together pay about $130 million—$90 million for MGM, $24 million for Sands and $17 million for Wynn—in one-time fees to the utility to cover the costs that the commission staff fears would otherwise fall on remaining customers. The casinos say that the sum—which represents years of electricity bills—would make it too expensive for them to leave.

Meanwhile, Sands and MGM are already generating electricity from rooftop solar panels at their properties. The ones atop MGM's Mandalay Bay hotel and convention center supply as much as 20% of the complex's electricity. Las Vegas Sands said solar panels at its Palazzo Resort provide a small portion of the hotel's electricity, while a separate array heats water used in the building's swimming pools and spas.


The three casino operators, which between them control more than a dozen Strip resorts, are expected to leave NV Energy by February 1.

HINTS FROM HELOISE

Dear Heloise: A friend of mine put a sofa out at the curb with a sign that said "Free to a good home." It sat there for several days, then he put a sign on it saying "For Sale - $20," and somebody stole it.

Gary in Costa Mesa, CA, Houston Chronicle, March 12, 2016

DALLAS DUMPSTER ART COMPETITION

Here are No. 1 and 2 winners. MUCH better idea than painting cows or horses or whatever.


The three casino companies, which between them control more than a dozen Strip resorts, are expected to leave NV Energy by February 1.

3 Strip gaming companies get OK to leave Nevada Power

State regulators gave their approval to three major Strip gaming companies to leave as customers of Nevada Power Co. to secure their own electricity supplies on the open market. But the three members of the Nevada Public Utilities Commission also required MGM Resorts International, Wynn Resorts Ltd., and Las Vegas Sands Corp., to collectively pay $126.6 million in exit fees for the privilege of doing so, a move that didn't sit well with the gaming companies.

EarthDayTX.org is the largest and most inclusive Earth Day initiative in the world! It is a 3-day celebration that is FREE to the public 10 am to 6 pm on the Friday, Saturday and Sunday closest to April 22, and is held at the 277-acre Fairgrounds in Dallas. What started as a free street festival 15 years ago has morphed into a monster celebration with 1,200 indoor and outdoor exhibit spaces, hundreds of speakers, and over 75,000 attendees!

This year there was huge interest in the tiny homes on exhibit advocating a large life in a small space. Hundreds of people stood in line for a chance to walk through the tiny homes. Think about coming and/or exhibiting next year!

FINAL WORDS:

I think having land and not ruining it is the most beautiful art that anybody could ever want to own.

Andy Warhol