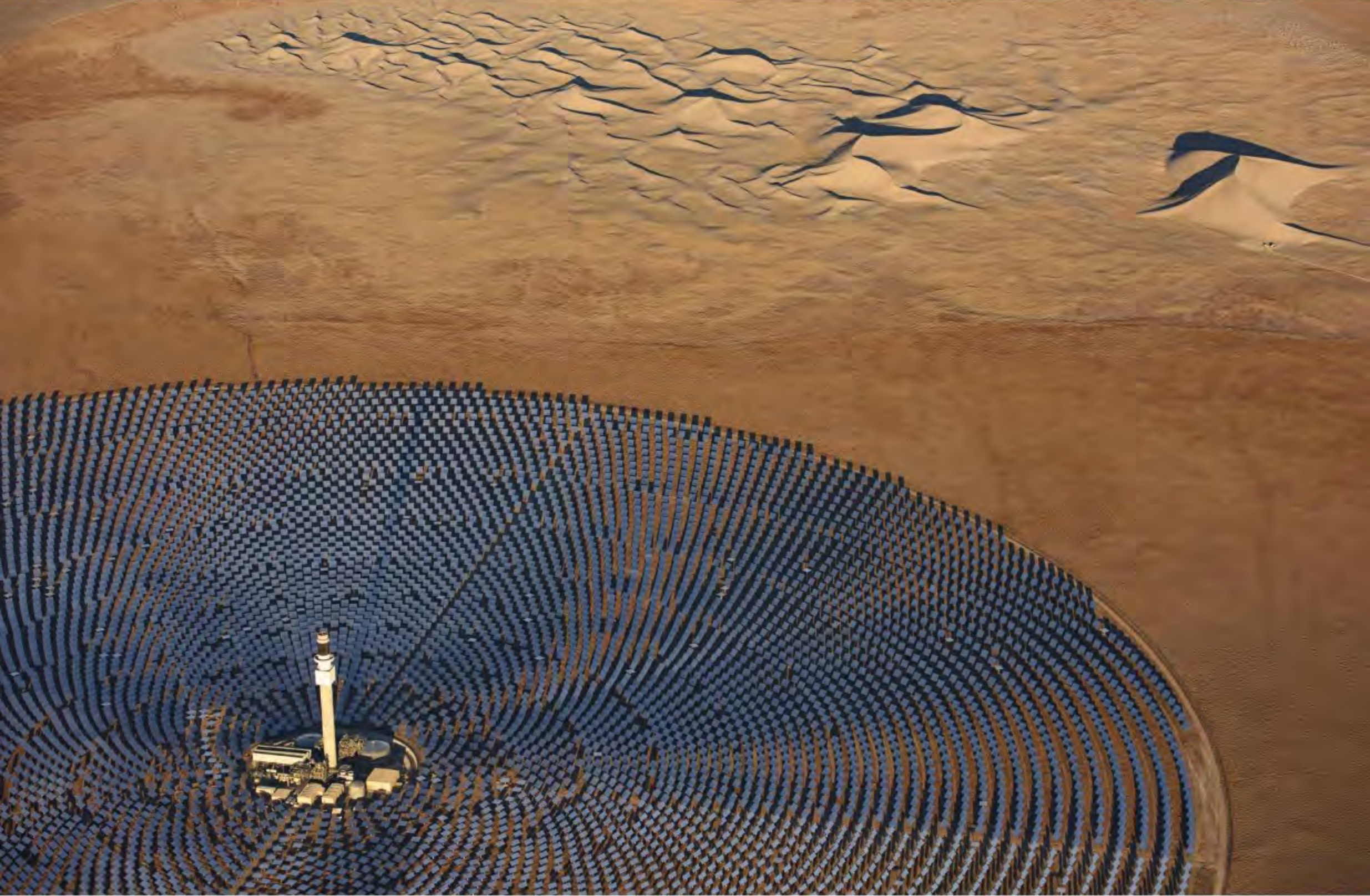


The Energy of Tomorrow Looks Strikingly Artistic from Above

Two photographers share their unique perspectives on the growing wind and solar power industries.



Some large-scale solar power installations concentrate sunlight on a pipe of oil that, once heated, boils water to generate electricity. Others, like this one in Nevada, reposition mirrors to focus sunlight on a central receiver tower, in which molten salt powers the generator.

PHOTOGRAPH BY [JASSEN T., NATIONAL GEOGRAPHIC YOUR SHOT](#)



By **Rachel Brown**

PUBLISHED MARCH 23, 2017

Join us in [The People v. Climate Change](#) and share an environmental portrait of someone taking positive steps to protect the Earth on [YourShot](#) or social media. Use [#MyClimateAction](#) to share a first-person perspective on how we as humans face climate change.

When seen from thousands of feet in the air, solar installations and [wind turbines](#) become abstract works of art: a glinting fractal of metallic petals circle a single pale stamen, and sharp, slender flowers tower above the earth.

Futuristic and abstract as these sites may seem, the concrete reality is that [solar and wind energy are thriving](#). ([Explore what your state's energy mix will look like with 100% renewable energy.](#))

Each year, government incentives, shifting public policy, and technological advances make these sources of clean, renewable energy more attractive to corporations and individuals alike. And in the United States last year, [solar employed more people than traditional coal, oil, and gas combined](#). ([2016 was a big year for oil pipelines; here are 3 takeaways.](#))

Some worry it's too little, too late. Scientific consensus agrees that the need for green energy is greater than ever: the carbon emissions of an average Westerner [melt 323 square feet of Arctic ice a year](#), contributing to global sea level rise. ([These side-by-side photos show climate change's dramatic impact on Arctic glaciers.](#))

Turning from fossil fuels to an array of clean, renewable energy sources—like solar and wind—is a step in the right direction. And for two photographers whose work was recently featured as part of National Geographic's [#myclimateaction](#) challenge, the future is bright. ([See editor's top picks from the Your Shot challenge.](#))

YOU MIGHT ALSO LIKE

[How a Pacific Island Changed From Diesel to 100% Solar Power](#)

[How Technology Pushes Science Forward](#)

[Will We Soon Be Riding on Solar Roads? The Idea Gains Traction](#)

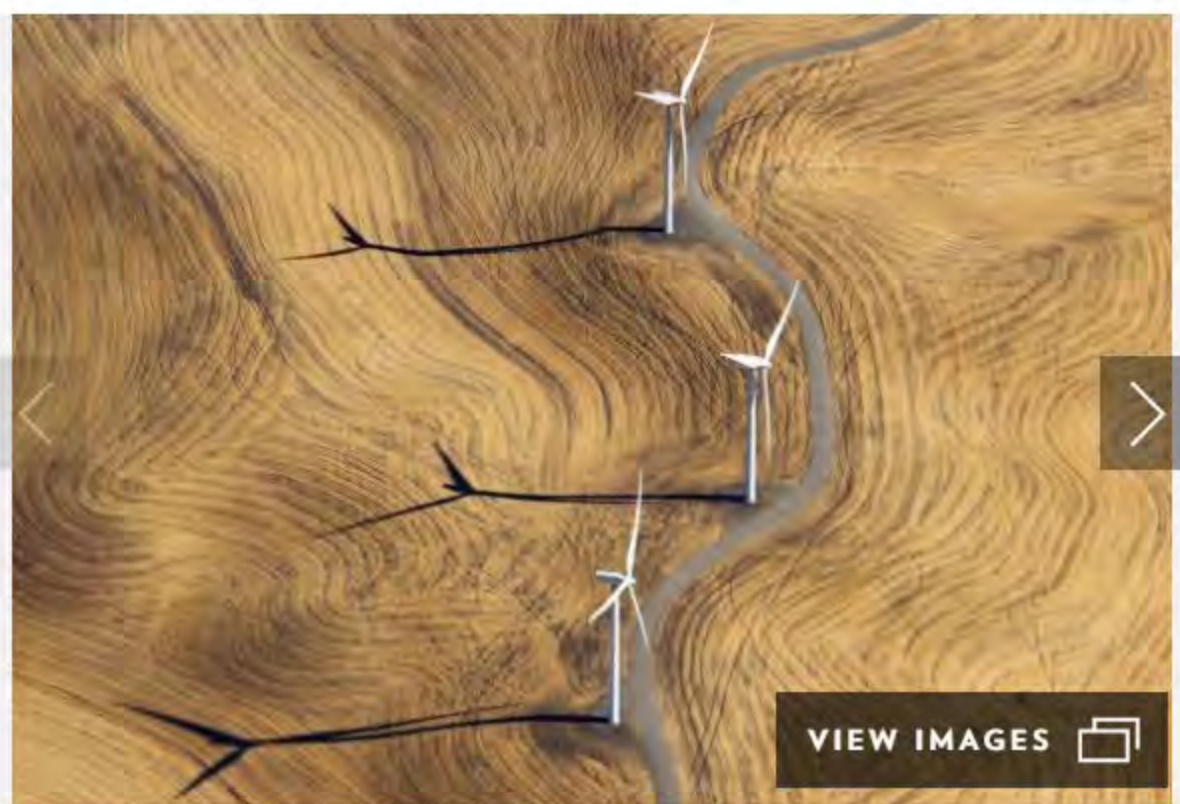
EYE IN THE SKY

A native of Bulgaria, [Jassen Todorov](#) is a violinist and music professor at San Francisco State University. He's also a pilot and a member of National Geographic's [Your Shot](#) community, regularly sharing photographs taken from his four-seater plane.

"In my twenties, I was freaking out about being able to find a job" as a musician, Todorov laughs. "So I thought, 'What if I became a pilot?' Well, I did, and I haven't looked back."

But he's certainly looked down. "It opens up a whole new world," he says. "Flying from point A to point B, there's so much to discover in between... it's just a matter of looking and realizing 'Oh my god, this is incredible, I better photograph this.'"
([Meet another Your Shot photographer documenting climate change.](#))

< 1 / 5 >



A row of wind turbines stands tall in California, where officials have pledged to source 50% of the state's energy from renewables by 2030.

PHOTOGRAPH BY [JASSEN T., NATIONAL GEOGRAPHIC YOUR SHOT](#)



Todorov started intentionally documenting both the good and the bad: he saw fascinating renewable energy installations, but also oil spills, Superfund sites, and massive pools of toxic waste.

"I have this point of view from above that has let me document how our impact is just so powerful on our fragile nature," he says.



Left: Since being listed as a Superfund site, the 12,800-acre Concord Naval Weapons Station has seen some recovery from its three decades of heavy metal contamination. **Right:** Fracking for natural gas and drilling for oil displace enormous volumes of wastewater, in Kern County, California. The county is also home to the Kern Water Bank, a 32-square-mile underground water reserve currently in the hands of private corporations.

PHOTOGRAPH BY [JASSEN T., NATIONAL GEOGRAPHIC YOUR SHOT](#)

(LEFT) AND PHOTOGRAPH BY [JASSEN T., NATIONAL GEOGRAPHIC YOUR SHOT](#) (RIGHT)



"Everybody's trying their best, I think—solar power plants and wind turbines are being built all over," Todorov points out. "They're beautiful to look at from above; some of them are very futuristic. Knowing that they're for clean and renewable energy just makes you happier—there is hope!"



An aerial view of a windmill farm at sunset in northern California. By 2050, wind power could supply an estimated 35% of California's energy, and 30% of the world's energy.

PHOTOGRAPH BY [JASSEN T., NATIONAL GEOGRAPHIC YOUR SHOT](#)