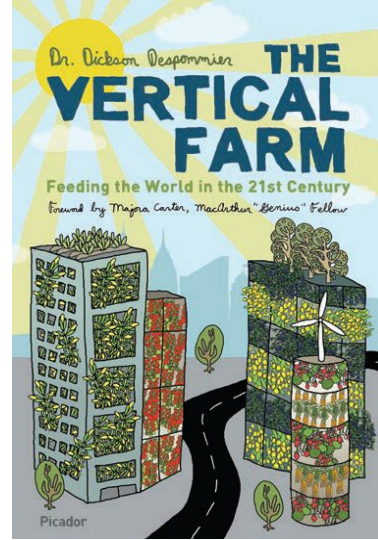




## rise up

When it comes to saving the planet, there aren't many ideas more captivating than vertical farming. The concept is a simple and ancient one (think: the Hanging Gardens of Babylon) – it suggests that, instead of growing produce on only one plane, we ought to be able to grow it in tiered levels, thereby trading horizontal space for vertical space. In 1999, Dickson Despommier at Columbia University came up with the idea to house a farm in a skyscraper. Despommier, a master of making complicated ideas seem obvious, described vertical farming as “a closed loop agricultural system in which all the water is recycled, the nutrients are recycled and the only thing that ever leaves the building is the produce.” It didn't take long before people got the picture. There was a seemingly endless upside: locally grown food, no need for pesticides or herbicides and the ability to return massive swaths of farmland to the wild. Big cities contacted the professor, *The New York Times* wrote an article about his concept and a worldwide buzz began.

Of course, there were a lot of logistics to be worked out; vertical farming is as complicated a system as any other type of farming. There was a plethora of legitimate concerns: how to power an operation of this scale, the



CLOCKWISE FROM LEFT Dickson Despommier's book *The Vertical Farm*; a vertical farm in Korea; a rooftop with wind generators



ecological trade-offs involved and whether (even with current fuel costs and shortages) there would be significant money and energy saved. Through it all, Despommier remained sunny and idealistic, with his basic response being, “Just let us try.”

Near the end of the 2000s, the Vertical Farming Rocket Ship lifted off. In a recent conversation with *Coast*, Despommier cited functioning vertical farms in Korea, Japan, Holland, and the United States (Chicago and Seattle). When his book, *The Vertical Farm*, was published in hardcover in 2010, all of the art was conceptual. By the time the paperback came out a year and a half later, he was able to include photos from nine working farms around the world. As with the advances in the automotive industry, this progress is sure to spur an even more rapid change. “Vertical Farming will have its own natural Darwinian evolution,” Despommier says, “with some farms working out and others falling flat. But no one argues against the concept.”

ment of a new division focused solely on promoting and developing vertical farms in Southern California. Erik Cutter, EnviroIngenuity's managing director, says, “Our vision is a future where neighborhood farms support their local community with affordable, healthy, organic produce.”

A lofty goal, to be sure, but also a worthy one. Speaking on the current boom in vertical farming in Orange County and around the world, Despommier's voice fills with excitement. “I think we're seeing the beginning of an important movement that will shape how we grow food around the world,” he says. The movement may be just beginning in Orange County, but the future is bright indeed. – STEVE BRAMUCCI

■ **GO VERTICAL** :: Learn more about vertical farming, and how it's catching on in Orange County.

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