




Hydroponic farming is highly productive but relies chemical fertilizers

Case 8: ReGen Village

Almere, near Amsterdam, The Netherlands:

Origin: At the 2016 Venice Biennale, California based tech-entrepreneur James Ehrlich presented his vision for what he calls the ‘Tesla of eco-villages.’ A modern, sustainable community that uses the best of today’s technology to grow its own food, generates its own energy, recycle its own water and manage its own waste. Future-proof real estate development just outside of the city centre can be a way to actively respond to the challenges of urbanization, a growing global food crisis, and ever-increasing CO2 emissions.

Construction of the prototype village in Almere should start early 2018, with the first families moving in around summertime. But more locations have already been revealed in Sweden, Norway, Belgium, the UK, and the United States.¹

	Secondary Tools
	✓ Self sufficient circular (‘closed loop’) economy
	✓ Local energy production (using biogas, solar, geothermal etc.)
	✓ Vertical farming, aquaponics and aeroponics, permaculture etc.
	✓ Local communities

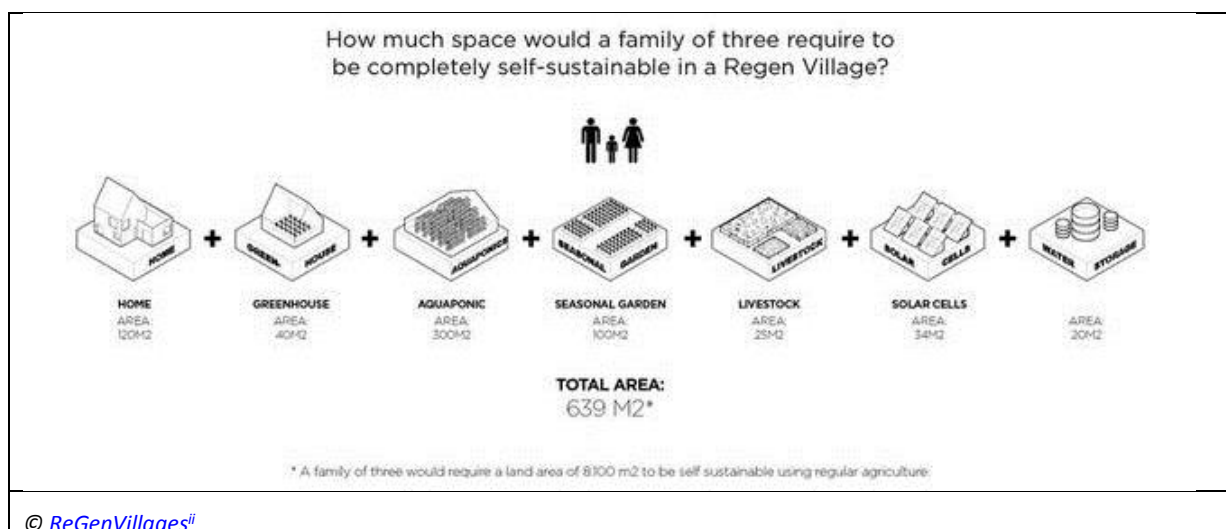




Vision of a ReGen community

The concept: Imagine a neighborhood that can grow its own food, produce its own energy, and turn its waste system into a closed-loop Regenerative system. Now imagine a network of such villages all over the world. Pretty far-fetched, eh? Maybe, but that's what people thought just a few decades ago, when the first modern hybrids were being brought to market, and the idea of affordable and practical electric cars was starting to be pursued commercially.

But today, even just a quick look at the alternative transportation market, which includes everything from e-bikes to electric airplanes, reveals a quite different view, and while there are a number of kinks to work out (cutting costs, adding infrastructure), it's starting to look a lot less like science fiction and a lot more like we're living in the future right now. And although electric vehicles might seem a lot sexier to talk about than housing developments, addressing the sustainability of our living quarters, and the neighborhoods and communities that surround them, is something at least as eco-worthy as the latest electric mobility innovations.



With that in mind, this intriguing eco-village concept, ReGenVillages, looks as if it's got real potential for guiding the future of sustainable neighborhoods. It's certainly not the first attempt to build self-sustaining communities, but it does seem as if the necessary technology is approaching the inflection point, where dropping costs and progressive policies (and consumer demand) might enable something resembling truly sustainable living situations for more people than just the off-grid crowd.

The ReGen pilot development of 25 homes in Almere, Netherlands, begins in summer 2018, with the aim of integrating local energy production (using biogas, solar, geothermal, and other modalities), along with intensive food production methods (vertical farming, aquaponics and aeroponics, permaculture, and others) and 'closed-loop' waste-to-resource systems, along with intelligent water and energy management systems. The project has the potential to redefine residential housing developments, with a focus on building "integrated and resilient neighborhoods that power and feed self-reliant families around the world." The expected cost for a single family home will probably start somewhere around €275,000, but once the system has been tested and proved viable it should be affordable for everyone – depending on the location and the resulting cost for land.

According to the Regen website, the problem this concept addresses is the coming population boom, with an estimated 10 billion people who will have to live on (seemingly) limited resources by 2050, which is expected to put unprecedented demands on our clean water supplies, food systems, and energy systems. Its solution is to design for resiliency from the get-go, and instead of focusing on trying to retro-fit sustainability solution into existing residential developments (which has merits as well); the project aims to instead use a ground-up approach.

"Desirable off-grid capable neighborhoods comprised of power positive homes, renewable energy, water management, and waste-to-resource systems that are based upon on-going resiliency research – for thriving families and reduced burdens on local and national governments." - ReGenVillages

"We're really looking at a global scale. We are redefining residential real-estate development by creating these Regenerative neighborhoods, looking at first these greenfield pieces of farmland where we can produce more organic food, more clean water, more clean energy, and mitigate more waste than if we just left that land to grow organic food or do permaculture there." - James Ehrlich, CEO of ReGen Villages, via FastCoexit.

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Sources and Further Reading:

ⁱ Source: <https://letitgrow.org/city-culture/new-regen-villages-eco-village-almere/>

ⁱⁱ Source: Marham, D. 2016. This eco-village is designed to be fully self-sufficient, from energy to food to waste. <http://www.treehugger.com/culture/housing-development-designed-be-fully-self-sufficient-energy-food-waste.html>, Esta villa autosostenible podría ser el futuro de la vida semi-urbana. 20 September 2016 http://www.archdaily.co/co/795346/esta-villa-autosostenible-podria-ser-el-futuro-de-la-vida-semi-urbana?utm_medium=email&utm_source=ArchDaily%20Colombia