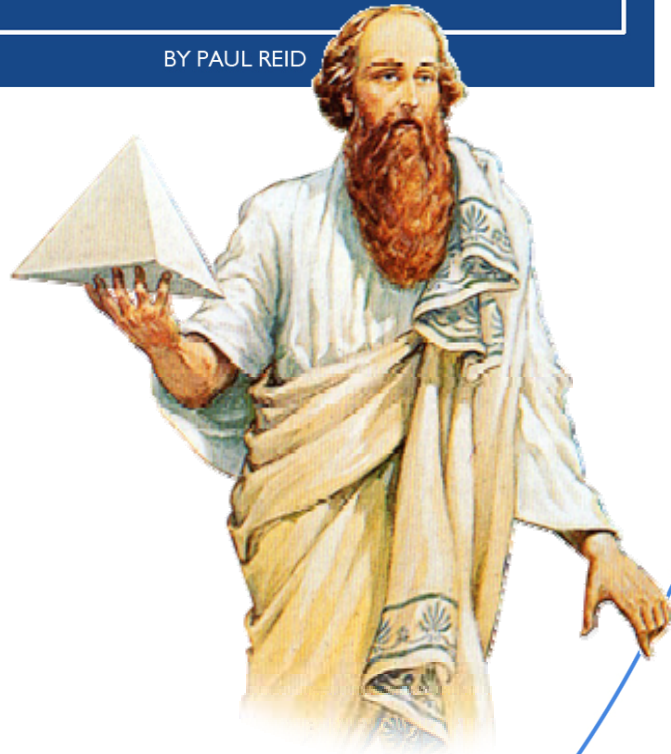


PLAN FOR THE PLANET

BY PAUL REID



Dedicated to:

My fellow humans,
particularly,
the young
and future
generations

Plan
for the
planet
and Earthshot
Prize entry

by
Paul Reid

2023



- John Lennon

Thank you HRH Prince William for putting together the Earthshot Prize and the Earthshot panel to help combat our environmental challenges.

When I was a young man, I set out with the vague notion to 'save the world'. Now, a few decades later, I am back, and guess what—there's something in the bucket.

I hope you find some merit in this *Plan for the Planet*.

Ladies and gentleman, I won't spend much time to restate the problems since, as you know, we (society) are up the creek.

I'll simply say that we are now, collectively, putting about double the amount of pressure on our planetary system than it can handle. We know that if you put double the amount of pressure on anything what happens—it breaks. We need to act soon to try to ease this great strain before we permanently break the natural systems of our dear planet Earth.

A little recycling here and a Tesla or two there will not be sufficient to mitigate the serious environmental challenges that we now face. In actuality, we will need to reduce our collective global footprint in the modern world by around 80 percent!

It's not easy when many people are still largely unaware of, and/or complacent about, how much beyond Earth's capacity we are living. Furthermore, we people feel too busy, stressed, tired and broke to do more than we already are, let alone to cut our footprint by another 80%. All the while, we are being lead to believe that if we all just do our best (to use green products and technologies), things will work out.

But will it? My faith, and probably yours too, is shaken year after year as deadlines for political change get pushed back but little else happens. If anything, our collective global footprint is only growing! So if this current plan - to basically hope that individuals will figure out how to cut their footprint by another 80% with green products and tech - is not the answer, then what is?

Ladies and gentleman, it is my contention that this is actually only half the answer and that we have been fighting this fight with the equivalent of one arm tied behind our collective back.

**In addition to trying to make our
communities' sustainable,
We need to be trying to make
sustainable communities.**

This is the plan in a nutshell, so if you can read no further, this is the main take-away. For those with more time, allow me to unpack.

What we have been trying to do is to fix our old, broken-down communities by retrofitting them with green add-ons. That's fine, but when Elon Musk decided to build the car of the future, did he simply strap some laptop batteries onto an old Buick? Surely not! That would have been silly, but that is what we have been doing.

We can continue on with this, I'm sure we will, but in addition, we need to be working on the alternative: to build brand new communities from the ground up – ones that are actually, truly sustainable. To date, this has never been accomplished.

A community that is created on purpose by a group of people is what we now call an intentional community. Intentional communities have been around at least since 550 BCE. That is when our old friend here, Pythagoras, from geometry fame, began in Croton, Greece, what is credited as the first intentional community.



Intentional communities can be seen as social experiments or communal experiments. The multitude of intentional communities include: collective households, co-housing communities, co-living, ecovillages, monasteries, survivalist retreats, kibbutzim, ashrams, housing cooperatives and all of those utopian attempts.

The Big idea

Here is the big idea with intentional communities: if we humans could create just one that was both highly sustainable AND highly livable, then we could replicate versions of that system for use by more and more people around the world. Not only would the residents who live there be living better lives, they would be living in such a way as to take a much needed strain off of the planet.

Where are we at with this?

The evolution of intentional communities has taken us from Pythagoras' community in Croton, Greece to what we now call ecovillages. Today, it is estimated that there are between 7-10,000 ecovillages scattered around the globe.

I believe that those who are dedicating their lives to ecovillage development are the only humans on this planet really pointed in the right direction. I will tip my hat to all the individual activists: the off-gridders; the homesteaders; the Earth-shippers; the preppers. However, I believe the answer really lies with the community models—like ecovillages. For only through cooperating can we tap into the economies of scale that will bring down our global footprint.

Ecovillages though, as they are now, are still not the answer. Firstly, they are not very popular—only about 1 in 7000 of us humans currently live in one—a rare bird indeed!

Secondly, tests have shown that even the best of today's ecovillages are not what we would consider sustainable. Though they may cut a resident's carbon footprint by 50%, this is still ultimately not enough. Consider the findings of Samuel Alexander, who writes:

If everyone lived in an 'ecovillage', the Earth would still be in trouble

An ecological footprint analysis was undertaken of Findhorn Ecovillage in Scotland. It was discovered that even the committed efforts of this ecovillage still left the Findhorn community consuming resources and emitting waste far in excess of what could be sustained if everyone lived in this way. Put otherwise, based on my calculations, if the whole world came to look like one of our most successful ecovillages, we would still

need one and a half planet's worth of Earth's biocapacity. Dwell on that for a moment. — Samuel Alexander, Published: June 25, 2015 . the-conversation.com

A sobering assessment indeed. And that is why we need to evolve yet again in our IC (intentional community) development – from ecovillage to a community that is truly sustainable. How can we do this? This is the question to which the answer still remains elusive. Meanwhile, the Earth's stability hangs in the balance.

Luckily for society, I believe that I have located the missing ingredient whose absence has been holding back the much needed evolution of eco-villages. It was lying there on the side of the IC evolutionary path covered with dust.

The person who I credit with first providing this missing link is Alvin Toffler. In his classic book *Future Shock* (1970), Alvin identified the missing link that we need which at it's core is... (drum roll please)...

the scientific process: hypothesis, test, revision, repeat.

That's it! This is something that, although we do it with basically everything and anything that humans have ever developed: tools, toys, cars, planes, rockets, furniture, TVs, technology – anything that can be sold or bought basically. Yet, when it comes to entire communities, my research has revealed that this has never been attempted!

I repeat: *all* of the intentional communities that have been created to date have not undergone this one thing – the scientific process. This would include adequate funding, planning and expertise to go along with it. Sounds expensive, but even a fraction of the funding and effort that we put into our space and military programs might be sufficient.

So this is our collective blind spot. For what society needs to be doing most right now – designing and creating truly sustainable communities, we are not. This can only occur in the equivalent of a 'community laboratory' – where our scientific community can experiment to find out

what works and what does not. Do we have any of these community labs on the go? The answer is no, we do not.

Here are some quotes by Alvin Toffler, from his book *Future Shock*, that I believe society needs to re-read, and then heed.

(Warning: the following contains the U-word — utopia. This is a word that carries so much baggage that it has been virtually cancelled from serious use. In Toffler's day though, this was the language that was being used to describe advanced intentional communities, such as we still need today)

"Rather than ostracizing utopians, we should take advantage of their willingness to experiment, encouraging them with money and tolerance, if not respect."

Here is where Toffler really nails the solution—and this is still one of the main problems today—that of respect. Mainstream society is still not giving our ecovillage pioneers the encouragement, money or respect that they need in order to develop, thrive and lead the way.

"it may now be too difficult for any individual writer, no matter how gifted, to describe a convincingly complex future. We need, therefore, a revolution in the production of utopias: collaborative utopianism. We need to construct 'utopia factories.'"

Here is where Toffler first mentions what it is that we still and most need today—what he called 'utopia factories'. This is really just another way of saying sustainable community factories. This is exactly what I believe society still needs to make a reality since it appears that Alvin Toffler's brilliant suggestion was ultimately overlooked.

"We can use utopianism as a tool rather than an escape, if we base our experiments on the technology and society of tomorrow rather than that of the past. And once done, why not the most rigorous, scientific analysis of the results? The findings could be priceless, were they to save us from mistakes or lead us toward more workable organizational forms for industry, education, family life or politics."

Here again, Toffler hits the nail on the head: we need is to apply science to the ways in which we live; this still needs to be done.

"Why not recruit living groups to try out the proposals of the utopia factories?"

Here, Toffler suggests that our community experiments utilize what I have been calling 'test residents'. Similar to how we need crash test dummies to test cars, so do we need test residents as part of our scientific exploration of community systems. This is something that still needs to be done.

"What would its family structure be like? Its economy, laws, religion, sexual practices, youth culture, music, art, its sense of time, its degree of differentiation, its psychological problems? By working together and ironing out inconsistencies, where possible, a comprehensive and adequately complex picture might be drawn of a seamless, temporary form of super-industrialism."

Toffler gives more details to the types of testing that we could be doing. He also mentions how we would slowly but surely iron out the wrinkles in these systems. Finally, he states:

Attempts to bring this knowledge together would constitute one of the crowning intellectual efforts in history—and one of the most worthwhile."

Amen. Yes, Alvin Toffler hit our current problem right on the head over fifty years ago, concluding that we should explore various modes of living and that this can only be done in community laboratories using the scientific method and 'test residents'. This is even more important now than it was in Toffler's day. For now, with our environmental challenges, we *need* to be doing this.

Another futurist from the 20th Century who believed that science was key to our survival was Buckminster Fuller. I won't slow us down with many great quotes from Bucky, but I will recall the title of one of his books: *Utopia or Oblivion*. That pretty much sums up where we are at.

Again, let's be clear though—we are not talking about the notion of a perfect society—a utopia—that word with all its baggage. We no more need a 'utopia' than we needed 'flying saucers' to reach the moon. No, we needed sensible rockets for that and now what we need are simply—sustainable communities.

So a *sustainable community* refers to a brand new type of intentional community that has not yet been created; one that will have been developed and tested using the scientific method; one that truly operates at the 1E (one-earth) level. This, humanity has not yet accomplished. The good news is, we have never really seriously tried—not yet.

I will not go too far into why I believe more has not been done in this area, but it would seem that any momentum for society to create a 'utopian' society was cancelled at some point in the mid-seventies. For during the sixties and seventies, there actually was quite a lot of movement and talk under the banner of utopia. These plans though all seemed to have evaporated.

Could it be that one too many 'utopian' failures put everything on permanent hold? Jim Jones comes to mind. Could it be that mainstream society did a pretty good job of hindering any real efforts in this area? Whatever the reasons, the reality is clear: at a time when sustainable community development and demonstrations should be at the forefront, they remain non-existent.

We do have our ecovillages, which have come a long-way in the past few decades, especially with the advent of GEN (Global Ecovillage Network). Still, as mentioned, they have been falling short due to an absence of adequate funding, expert planning and objective, science-based development. The entire movement continues to operate out on the fringes, still yet to be embraced by mainstream society. It is time now, however, for mainstream society to seriously get behind this new, wiser course that our ecovillagers have been trying to navigate on their own.

Mainstream society did get close once in the late 80s, early 90s with Biosphere 2. Costing close to 200 million in 1984, (equivalent in purchasing power to about \$526 million today), this experiment had science, experts, testing, and money behind it.



Biosphere 2

The only problems - it was designed for life on Mars, not Earth. Also, the experiment was ultimately considered a failure and abandoned because this synthetic biosphere was not able to support the scientists living inside for as long as was hoped.

Truly, the only failure here was not to continue on with the experiments. Of course it wasn't successful the very first time, which is why inventors and scientists need to repeat, repeat and repeat again. It took Edison reportedly 10,000 or so failures before he finally invented the light bulb, but thanks to his persistence, life on Earth has been radically transformed. So with Biosphere 2, what they should have done was fixed what the problems were and continued on.

The bottom line is, failure or not, Mars or not, the Biosphere 2 project exemplified the type of focus, time, expertise and funding that we could and should once again be focusing in this area. We may have 9,999 more tests to do, so let's get started.

We need to give governments, universities and other organizations around the world the green light to experiment with sustainable community development. Not just encouraging their administration, faculty and board members to allow it, but to begin to raise the money, invest the time and seriously begin focusing on this—now.

We need to see the establishment of sustainable community laboratories, because only in a lab setting will society have 'permissions' to try new and wonderful ways of living. In a lab setting, tests can be run and mistakes can be made; extensive changes can happen quickly, without the constraints of dealing with real residents in our politically controlled reality.

Of course, these are things that we cannot do within our current communities (including ecovillages). Here, people are not test residents and changes are controlled by rules, red-tape and politics. Of course, that's how it should be. No one wants to be an involuntary part of an experiment.

Using test residents may sound strange (probably as it has never been done before), but in addition to an experimental setting, test residents are what we need. These could be volunteers; these could be university students; these might be people that get paid; these could even be people who pay for the privilege of visiting such a community.

These community laboratories need not be expensive. Starting with just a small piece of land, say a quarter acre, university students could experiment to see if they can enable two or four people to live off of this quarter acre of land in a sustainable fashion. How about 10 people? How many could live off of one full acre of land and how well? Can they do this sustainably?

How about self-sufficiently, with nothing crossing over into that acre for say one month or one year? For instance, could a small group grow everything that they need to survive: food, energy, clothes, shampoo... everything? Once we can do this with 10 or 20 people, then let's see if we can get 100, 500 or 1000 people to live in a truly sustainable system. Now that would be amazing!

These are the types of simple tests that we need to be conducting to see if a) we can make our system sustainable (to get the

average footprint down by 80% and b) how livable (comfortable, fun, easy, affordable) can life be at this, the one-earth, level.

These are the two parameters that we need to guide us: sustainability and livability. *Sustainable*—because we need it to be, for the maintenance and love of our mother earth; and *livable*—for the love of ourselves and our fellow humans. The more livable we can make these new communities, the more likely they will become preferred over our current systems and we humans will be willing to make the switch.

These new communities will be designed with a synergy that we have not yet known. It will be akin to the difference between a table strewn with computer parts and a computer that has been put together and actually performs. This is the quantum leap we now need to survive the problems we now face.

The heart of the plan – in 3 steps

Where the rubber hits the road

Ladies and Gentleman, now that you hopefully see some merit in sustainable community development, I would like to share with you my three step plan on how to proceed in this direction both wisely and rapidly.

Step one: ISCA

Seeing that sustainable communities are worth investing in, the next step would be to form the organization to do just that. Ideally, I believe that it would be an organization with representation and investment from every country on Earth.

Just as we (society) needed a NASA (National Aeronautics and Space Administration) to put a man on the moon, so do we need a similar type entity to build truly sustainable communities—something like an ISCA (International Sustainable Community Administration). The name is not important, but this is what we need.

Apparently, it took 400,000 people working together to accomplish the moon landings and the cost was the equivalent of \$152 billion in today's dollars! Imagine what kind of sustainable communities we could create if we invested that level of expertise and money. This is the type of commitment and focus that our ISCA will ideally have. Let's put some effort in, shall we. Money should be no object now as we strive to keep Earth's systems in balance.

ISCA would work with all nations to help them with regards to sustainable community design and development, identifying and supporting those people and groups in each nation that could help with these sustainable community projects.

Step 2: The ONEarth Challenge

An amazing first step for ISCA

Once we have our NASA type agency organized, I am suggesting the following method for getting this idea underway quickly. I have been referring to this idea as *The ONEarth Challenge* and it is at the heart of this plan for the planet.

The name, ONEarth, was derived by combining our two guiding parameters: 'one earth' (the level of true sustainability) and 'on earth' alludes to (as in heaven), our parameter for livability.

I am hoping that *The ONEarth Challenge* might be something of a hybrid between a reality TV show and an international competition like the Olympic games. Endeavoring to include every nation on Earth, *The ONEarth Challenge* will be focused on the design, production, testing and judging of sustainable communities.

This challenge will accomplish a few things. Firstly and most importantly, it will bring every country together onto the one page of sustainable community development. Secondly, it will help to educate the entire world all about sustainable communities: their designs, their technologies and their importance.

The exciting moments will come when test residents will need to live in their sustainable community for a fixed period of time – maybe a few months. This part of *The ONEarth Challenge* would be similar to a reality show where cameras reveal how life in the community actually is. Here, for the first time, viewers from around the world would witness what life at the 1E level looks and feels like.

Following the demonstrations and judging process, awards would be given out to each country according to how well their community has performed. *The ONEarth Challenge* would help

spur all nations on to greater and greater SC design entries.

With this knowledge, not only will we be able to move forward with our SC designs, we will be greatly enhancing our ability to make our current communities sustainable as well.

Step 3: Replication

Now (thanks to the ONEarth Challenge) armed with the prototypes that have been developed in every nation around the world, our ISCA organization would then assist each country in improving their prototypes and getting them ready for mass production in their country.

To be clear, although replication may imply a 'one size fits all, cookie cutter' type of situation, the vision is that each community will be as unique and diverse as the people on this planet. Custom designed to reflect the initial developers/residents' uniqueness, these designs will one day be as varied as are automobiles or running shoes. The one thing that they will have in common is a sustainable base.

Just as our COVID19 vaccines were hurriedly applied around the world, we would be hurrying to build our sustainable communities for people to begin enjoying sustainable lives in.

Will we be in time? If all nations were to spend the next ten or so years investing in sustainable community development (following this plan), by then, humanity would likely have some excellent options to choose from. If the designers have done their job and life within these new community systems turns out substantially superior to our current communities, then we should see large numbers of people making the switch to these new, superior, sustainable community systems.

Like all of the sparks that must have occurred before the first actual flame developed in the invention of fire, such are all of the intentional communities that have occurred so far in history. Although nothing yet much on their own, when coupled with the right fuel, these sparks are going to ignite a wildfire of advanced civilization—one where virtually every citizen will have access to everything and anything.

That fuel, as I have pointed out here, is the full and immediate respect and support of our intentional communities by mainstream society. We can begin by supporting the folks at SCRaP (Sustainable Community Research and Promotion) as well as that fine organization, GEN (Global Ecovillage Network).

I know everyone has a short attention span these days, so if you stop reading here, that's okay; the rest is not so crucial.

You should now be knowledgeable and in favour of sustainable community development. For those with questions, comments, or who wish to donate to this cause, please contact:

Sustainable Community Research and Promotion (SCRaP)
online at: SustainableCRaP.ca

Dear reader, thank you for your attention in this matter.

Sincerely,

Paul Reid

Part 2

A sustainable community design

For those readers willing to trudge on, I will be putting on my SC designer's cap to provide an example of the type of sustainable community design that I am talking about. I want to emphasize that this is not THE example, but simply AN example of the type of community that we need to aim for; one that I encourage future sustainable community designers to improve upon.

Just as the first computers, first cars, and first airplanes look quaint compared to today's modern designs, I am sure that this design will pale beside those to come. I envision a day when sustainable/livable communities are as plentiful and diverse as are shoes, cars, or anything else.

Without further adieu, presenting:

1Example-Ville

To help remind everyone that this is just one example, I have named thee: 1E x Ample-Ville. (That's 1E, as in sustainable, and Ample, as in ample. Or just plain 1Example-Ville.

1Example-Ville is designed to be a customizable, replicable community that is both highly sustainable and livable.

Sustainability

Each 1Example-Ville community would be unique—custom designed by the people or groups who commission them, however, they would all have one thing in common: they will be running on a sustainable platform.

In order to meet this requirement—1Example-Ville would bring together in one place—all of the known environmental tools and techniques that we humans have at our disposal. This would include not only the latest in technological advances, but also those methods used through-out the ages that have proven to be compatible with nature.

Permaculture

This is a term which largely sums up the philosophy that 1Example-Ville would follow to guide us in this department.

According to Bill Mollison, cofounder of the movement, " Permaculture is the conscious design and maintenance of agriculturally productive ecosystems which have the diversity, stability, and resilience of natural ecosystems." To put it simply, permaculture works with nature instead of against it.

Sustainable Energy

Wind, hydro, tidal, geothermal, solar, elastic—IExample-Ville will aim to bring together all alternative energy sources together into an integrated system to provide clean, constant power.

Environmental Building Materials

Trying to keep our BMs as environmentally friendly as possible. the hemp plant and the plastic building material, ETFE, are two of the sustainable materials that 1Example-Ville would rely heavily upon. A quick word about these two materials:

Hemp

This amazing plant would be a major crop within 1Example-Ville. It grows relatively quickly (compared to a tree) and It can be refined into a variety of commercial items including paper, textiles, clothing, biodegradable plastics, paint, insulation, bio-fuels, food, and animal feed.

Hemp seeds are high in complete protein and a great source of iron. Hemp fiber has been used extensively throughout history: items ranging from rope, to fabrics, to industrial materials.

Hemp-crete are concrete-like blocks made with hemp and lime used as an insulating material for construction. It has shown to be usable as a replacement for wood for many jobs, including creating durable and breathable homes.

Hemp paper: Far superior to wood based paper. Several factors favor the increased use of wood substitutes for paper, especially agricultural fibers such as hemp. Hemp's use as a wood substitute will contribute to preserving biodiversity.

ETFE—Is a revolutionary building material

- approximately 1% the weight of glass, extremely light weight.
- enables a reduction of structural frame work, a big cost benefit
- high translucency. Transmitting up to 95% of light,
- can be lit internally with LED lighting to make them glow or projected onto externally like a giant cinema screen, creating dramatic results.
- Unaffected by UV light, atmospheric pollution and other forms of environmental weathering, ETFE foil is an extremely durable material.
- ETFE scores well on the eco-friendly front as well. Being 100% recyclable and requiring minimal energy for transportation and installation means that it makes a significant contribution to the move towards green construction and sustainability.

Locally sourced materials

Not only will 1Example-Ville strive to obtain what it needs from as nearby as possible, it is designed to have enough greenhouses to grow most of the raw materials that will be needed there. For food, for drink, for building, for health care, medicine—you name it, the aim will be to grow and process it on site.

Self-sufficiency

Closely tied to sustainability, self-sufficiency is another ideal that 1Example-Ville will aim for. This would enable the community to go for long periods of time (ideally, indefinitely) without the need of assistance/trade of any kind.

Although intelligent trading with other communities would be the norm, it would be beneficial to have this self sufficient capacity in

times of global turbulence: wars, stock markets, pandemics....the times when communities would benefit by being self sufficient: able to produce enough food, shelter and energy for residents even during the most challenging times.

Suitable for everywhere

Being self sufficient, 1Example-Ville would be able to thrive just about anywhere—even as a relative outpost in the middle of nowhere. Not only by producing its' own food, shelter and energy, but also because it has been designed as a microcosm: a combination of rural, urban, and suburban that contains nearly everything that a person could want or need within walking distance.

Location

1Example-Ville is designed so that it could function nearly anywhere while fitting in seamlessly with its' surrounding environment. The ideal location could be somewhere beside a lake and/or ocean, with forests and fields; with at least one small river running through. There are plenty of locations in Canada that could fit this description. From the prairies to the mountains, from South to North, 1Example-Ville will be able to set up anywhere.

For the ONEarth Challenge, all countries will need to find the most ideal location that they can within their country.

Cost

This model of 1Example-Ville is designed for 1000 residents with a budget of about \$250 million dollars. That would require each of the 1000 residents to put in \$250,000 each*. This number roughly compares to how much a person needs to buy into the real estate market.

*Not every 1Example-Ville need cost so much.



In 2023, \$500,000 might buy one one bedroom (700 sf) apartment in this complex in Chilliwack BC, Canada.

In this version designed for \$250,000 each, the resident receives:

- a) one small house, *custom made: valued at about \$50,000
- b) access and co-ownership of neighbourhood centres; each valued at about \$10 million
- c) access and ownership of a community centre: valued at about \$100 million

- all services, activities, food and drink would be included or offset by guest expenditures at 1Example-Ville's many community businesses: accommodations, restaurants, attractions, amusements, products and services.

So what does this 1Example-Ville look like?

Physical description of 1Example-Ville

This flower you see here was the basis of 1Example-Ville's layout. Using our old friend, biomimicry, I detected similarities between the design of a flower and a community system.



Biomimicry borrows nature's blueprints, recipes, processes, and ecosystem strategies and then comes up with design principles to solve our own problems.

The leaves represent a type of industrial/farming zone; the stem is a transportation route; the flower petals are like neighbourhoods and in the middle, at the centre of our community, would be a wonderful community centre. Around the flower you could envision a circle to represent the boundary of the community.

Arriving at the front gate—residents and visitors pass through a giant scanner/x-ray machine. In this day and age, unfortunately, it seems as though such precautions are necessary. Passing through would be as secure and swift; no weapons in and no stolen goods out. Yes, the gate and the controlled perimeter would go a long way in preventing crime internally as well as external invasions from wild fires, wild animals or wild people.

Car free

Being walk-able, 1Example-Ville will have no use internally for full sized vehicles. Rather, small electric or self-propelled transport such as bikes, scooters, skate-boards, etc. will be used. For external adventures, 1Example-Ville will have a vast vehicle fleet that every resident will have access to. These will include the best classic cars from vintage to modern. As with all other tools and equipment at 1Example-Ville, just sign them out.

Being car free will further help with 1Example-Ville being sustainable. And, instead of all of those nasty noises, fumes and deadly roads, the community will be quiet, peaceful and full of open grassy spaces for kids and adults to enjoy safely. Just imagine.

Food production

As with a flower, the main production of food occurs in the leaf section. Here is where 1Example-Ville would locate it's extensive hydroponic gardens where every type of edible known to man: fruits , vegetables, grains, seeds, nuts, mushrooms – you name it – will be growing.

Greenhouse production is really at the heart of 1Example-Ville because it has so many advantages including increased production increased efficiency; with increased pest, weed and disease control; minimized production risks and less waste.

The goal would be to supply 100% of 1Example-Ville's food requirements via on site growing. With the latest in bio-intensive agricultural techniques, it is estimated that 1Example-Ville might need approximately 25 acres of hydroponic garden space to feed its' 1000 residents and guests. Ideally, the entire food production cycle: planting; growing; harvesting; transport and storage—would occur as part of a (nearly) fully automated system.

Likely not all of the crops would be grown inside; hemp / wheat / flax etc. might still be grown in open fields, but as with the rest of the design, it will be altered based on what the science, experts and test results tell us.

Industrial Area

Also located in the leaf section of our community would be any industrial type activities. Conveniently distanced from the main residential area, here would be a variety of workshops, tools and machinery - all available for use by the community.

The Farm

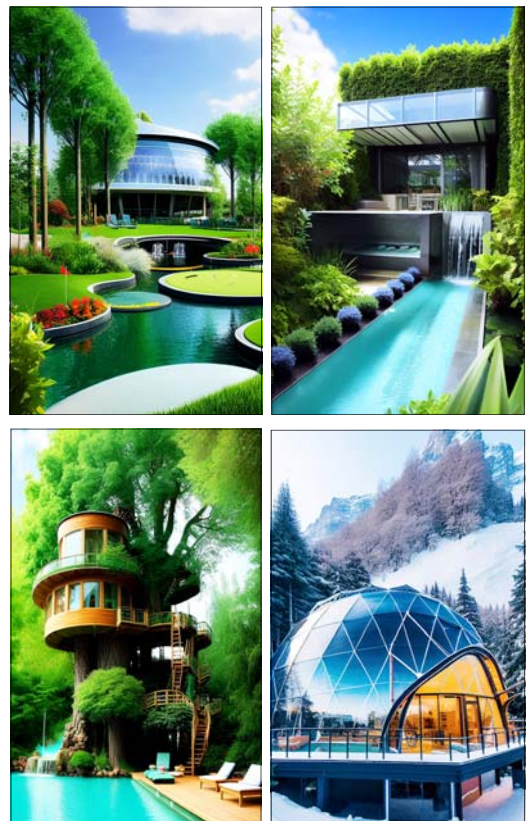
Nearby to the leaf area would be our farm area with a classic (yet hi-tech) farmhouse, barn; plus all the farm animals: horses, goats, pigs, chickens, rabbits, ducks, sheep, cows.

Would we eat the cows? Keeping with our vow to lead the planet in sustainable living, probably not too often (we'll see what the science says) but cheese, eggs, wool, milk, bacon (ya gotta have bacon) and more could come from the farm area.

Individual residences

In conjunction with the tiny house movement that is beginning to blossom, every adult resident of 1Example-Ville will have their own individual tiny home residence as designed by the owner.

These would be scattered throughout the community, their location depending on various factors: the community layout; the physical location of the community and its terrain; what spots are available; the resident's preferences; who the neighbours might be; which way the sun sets, etc. Most residences would be located within the community boundaries, although some hermit-types may choose to live farther away.



These are some AI visions of potential individual residences in 1Example-Ville.

Pictured here are some fun examples, illustrating how unique each tiny home could be. All shapes and sizes, possibly underground, in the trees, under water...where will you put yours?

For people who like to travel a lot, their tiny home might be more of a mobile home – as many tiny houses now are. Perhaps everyone in the future will live in more of a mobile home that is continuously on the move; docking at these neighbourhood support centres throughout the network as required. This was also one of Buckminster's visions.

In 1Example-Ville, there would be up to 100 of these tiny-homes around each neighbourhood centre.



The Neighbourhood Centres

Going back to our flower analogy, each 'petal' of our flower would contain one neighbourhood centre. Surrounded by the most beautifully landscaped grounds with pools, patios and gardens, these centres would include dining rooms, living rooms, lounge areas; rooms and alcoves of all sorts and sizes for a variety of functions; stage and performing areas; dance floors; entertainment areas; a large commercial kitchen and rooms for guests and visitors.

Each of these centres would also provide for the surrounding residents needs: a shared workshop /tool/ equipment room area; general storage; a clothing depot with automated washing, storage and delivery features; medical facilities, etc.

In addition to supporting the local 100 or so residents, each neighbourhood centre would serve a unique function for the entire community. Depending on the wants and needs of a community group, during the design stages, they could pick and

choose from a variety of neighbourhood centres. Here are some examples:

Ski chalet / outpost, hunting lodge

If your community is near a mountain that gets snow in the winter, the community might want to turn that into a ski resort, complete with ski chalet.



Golf centre and clubhouse

Everyone I know seems to love golfing. It's a sustainable, healthy pastime that people of all ages love. The plan would be to have a golf course around the perimeter of 1Example-Ville to serve a dual purpose as a fire-break that protects against forest fires.



History section(s)

This is an area of the community where one could move back through time and space: an old western town; a medieval castle; a Greek/Roman type civilization; a First Nations village; ancient Egypt; back to cavemen(?).



Apart from being a fun and educational attraction for visitors and residents, this historical section would provide the community with real-life tools and machinery for getting things done in case of a power outage, war or similar calamity. With a blacksmith/forge area; vintage farming implements, tools and machinery that do not require power: our history area be like a back up plan: prepared to keep the community functioning no matter what.

Vineyard and Winery

Would provide the community with it's house wines and act as another tourist area for people to enjoy: the winery with it's cellars, vineyards, fine dining restaurant and other areas to hang out.



Main street with brewery/distillery

Leading up to our community centre could be our Main street with brew pubs and distillery. Providing the community (and beyond) with our own brand of beer and spirits, this area would contain many shops, services and a conglomeration of pubs serving the best pub grub. Darts anyone?



The hot springs/spa/wellness centre

Warmed by a naturally occurring hot spring (courtesy of geo-thermal drilling), this is an area for the community and guests to hang-out and relax in a Zen-like setting.



Ocean and Lake resorts

Everything you need to have fun on the water with kitchen/restaurant, patios, pools, dock, boats, water toys. One for our ocean front area, and another on the lake.



Transportation Hub

Planes, mini-trains and automobiles to sign out, plus everything transportation related. Includes a restaurant/pub; raceway, car club, mini-train station and a small airport.



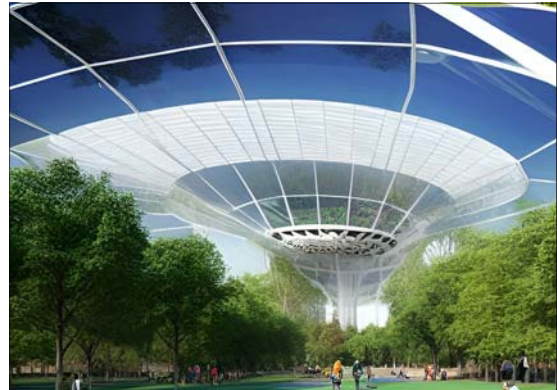
These are just a few of the examples of possible neighbourhood centres. Certainly there are hundreds of other ideas for the designers of tomorrow to explore.

Time to move onto.....

The Community Centre

As mentioned, in this model, we will be budgeting approximately 100 million dollars towards our community centre – equal to that of all of the neighbourhood centres combined. What kind of centre could be built for 100 million? Over the years, the following design has evolved in my brain.

What do you think? I think it is quite unique as I don't think I've seen one. Please imagine....



a 1Example-Ville community centre similar to a soccer stadium, but shaped more like a giant horseshoe that is open at one end. The two ends of the horseshoe would be at ground level, with the rounded end rising up seven or so stories.

Covering this structure would be a dome made of our forementioned friend, ETFE—that durable, light-weight material as used at the Eden Centre in Cornwall, England. It allows trees, grass and gardens to grow underneath, so, although the community centre would be sheltered from the dome high above, it will seem as though this area were outdoors.

It would be something that most of us have never experienced – a mixture of indoor and outdoor. You could be sitting on a grassy field or under some trees, having a picnic or working on your computer, never needing to worry about the elements due to the clear dome of ETFE high above.

In the centre of our centre, under this ETFE dome, could be:

A large dining and stage area, with enough seating for every community resident and guest; a giant media screen behind the stage with the latest visual/sound technology; the best in dance floor technology (yes—there we will have time for a lot of dancing). There would also be amazing landscaping, gardens and water features throughout.

A gradual hill stretching across the middle of the centre is designed to separate the dining / stage / screen area from a large multipurpose grass field / sports area. In addition to providing a divider, it would provide a nice viewing area from which to watch the events on either side.

On the sports side of the hill would be a large multipurpose grass field: a few multipurpose game courts: for basketball, lacrosse, hockey, soccer, baseball, etc.

All of these would be shielded from the elements by our ETFE roof and therefore available for use 24/7, 365 days per year.

The open end of the community centre's dome would be capable of opening and closing to provide an air-tight seal. This doorway, along with other vents in the dome, would allow the entire community centre to be climate controlled. Whether the weather outside were cold, hot or rainy, the weather under the dome could remain ideal. It would also protect residents in case the air were to be contaminated. I.e. by smoke or radiation.

People could walk around the perimeter of the horseshoe shape – it would be a gentle, wheelchair accessible, slope with artworks, water features and gardens and nice vantage point from which to see all of the activities below. Providing entry into the various (7) levels, this walkway would be partially covered by the dome, and partially open to the elements.

People could also walk on top of the ETFE roof. How exciting! It would feel as though you were walking on thin air, high above the ground below. In addition for use as a viewing deck, to see the action below, a section of the roof could double as a water slide so residents might slide merrily down to a pool below.

The dining/stage area would be the social focal point of the entire community where residents and guests would gather to eat, relax, socialize, and to take turns entertaining each other on the stage and screen. Here every evening, residents could watch the highlights of the day: the sports events; the go kart races; funny happenings and magic moments caught on camera by 1Example-Ville's media club. This might be followed by live performances from local and visiting talent of all ages. Talking, mingling, singing, dancing, eating and drinking – a real social scene.

Close to the dining area, would be the main commercial kitchen. where 1Example-Ville's best chefs (and apprentices) would work to prepare food for the dining area, offering an extensive array of food choices at all times, with seasonal and daily specials.

Connected to this main kitchen would be the main storage area. As food arrived, via waterway, from the leaf area, it would be stored in this temperature controlled storage/display area, where all residents would be welcome to take what they needed. From here, food and other supplies could also be sent via the waterways to the ten neighbourhood centres and from there to the surrounding individual (tiny) homes.

Contained within the two 'arms' of the horseshoe would be different areas catering to the needs and wants of people of all ages:
Baby, Child, Kids Zone: fun, games and learning for children;
Teen Zone: fun, games and learning aimed at teens;
Young Adults Zone: everything a young adult wants and needs;
Adult Zone: a nice place for adults who are getting a lil' older;

Retirement zone: let's slow it down. Here are things to help with the health, comfort and fun of the older gang;

The Last Stop: for the terminally ill. This is part of the community centre, so one can look down to see (and be apart of) all the action right up until one's dying day - surrounded by friends and family.

Hospital

Also located in the community centre, adjacent to the Last Stop, would be 1Example-Ville's main hospital. Of course, we will have the best medical facilities for our needs, but also, a helicopter and pad in case an emergency air-lift is required.

So these are just a few ideas for what could go into a \$100 million dollar community centre. It would largely depend on the group that is planning to live there. For just 1000 people, I believe \$100 million could go a long way in a multi-faceted life facility.

Imagine getting co-ownership and full access to this wonderful community centre, the 10 or so neighbourhood centres, the industrial (leaf) area; and your own personal home. You would be a co-owner of this magnificent eco-tourist destination (including free food, drinks and activities) all for just one investment of \$250,000. That is the power that cooperation brings.

Other features:

Gardening and landscaping

Through-out 1Example-Ville would be a beautiful variety of gardens, ponds, pools, canals, fountains and other water features. The Gardening Club would bring garden designs to life for all to enjoy. We wouldn't need to rush things in 1Example-Ville, but would have ample time to make things truly beautiful.

Designed with beauty and ascetics in mind – like a Zen temple with beautiful gardens and landscaping everywhere. Since 1Example-Ville would be a secure community, every outdoor item, whether it be a bench, a sign, a table, a chair—would not need to be bolted down and constructed to withstand the worst vandals. On the contrary: every item in the community, be it very expensive and/or delicate, could be left out without fear of vandalism or theft. For this reason, the beauty, and safety, of 1Example-Ville could be exceedingly hard for us to imagine.

Designed with safety in mind

In addition to being virtually crime free, 1Example-Ville is designed to be safe: no cliffs or ledges to fall off, no traffic dangers, but carefully designed in every respect, resulting in less trauma, drama and trips to the hospital. Yes, we would focus on pre-emptive health, catching safety problems and their consequences before they catch us.

Replication tools

Each 1Example-Ville would include replication as part of its daily 'chores' - helping neighbouring communities to get up and running. This could also be considered as another business (construction/development) that helps our 1Example-Villes to continue replicating at a minimal cost while providing more local jobs and bringing in revenue for the community. For this, the community would need to have access to the tools, materials and resources that go into building future communities and residents would need to be trained in this area as well.

Ability to travel

Ideally, in the future, there would not be just one 1Example-Ville, but a network that was all linked together. This network would enable people to follow their natural curiosity by traveling around this international network. This factor would make living in a sustainable community more attractive than the type that says "stay here and don't leave."

Time and things to do

If our residents are only 'working' about 2-3 hours per day, what will they be doing the rest of the time? Watching TV? Playing Video games? Maybe, but at 1Example-Ville there will be every activity under the sun to enjoy, with the necessary equipment and guidance available for all of these activities, they will be free for all residents to enjoy. To refresh your memory of all the wonderful activities there are when one actually has time and opportunity, see next page.

ORGANIZATION

1Example-Ville will have been designed and tested so that it's residents might experience as close to pure freedom as is physically possible here on Earth. Of course, these residents will still need to provide for their own basic needs, so this will require that they commit two to three hours (on average per day—yet to be tested) on community maintenance.

Hybrid Economy

All of our humanly common needs—these we will work on together—as a whole. These are the food, shelter and energy needs, plus the general maintenance of the entire community. We will need to test to see how such a system will work, including how many hours each person will need to work on this. This is something that we would aim to reduce to, for arguments sake, we could say two hours per person (give or take—with age, ability, etc. taken into consideration).

Once these common chores were done, residents would be free to do whatever they want, so long as it was sustainable, peaceful, positive, and not harmful to the environment.

Some may choose to relax and do nothing, though all will have access to the highest variety of leisure activities: all sports, eco-tourism activities (hiking, camping, canoeing, boating); education—furthering one's knowledge through study, research, experimenta-

Things to do

Activities available at 1Example-Ville

Hobbies 3D printing Acroyoga Acting Amateur Radio Animation Anime Aquascaping Art Astrology Astronomy Baking Barbershop Music Bartending Basket weaving Baton twirling Beatboxing Beer tasting Bell ringing Binge watching Blacksmith Blogging Bonsai Board/tabletop games Book discussion clubs Book restoration Bowling Brazilian jiu-jitsu Breadmaking Building Bullet journaling Butchering Calligraphy Candle making Candy making Car spotting Car fixing & building Card games Cardistry Ceramics Chatting Cheesemaking Chess Cleaning Clothesmaking Coffee roasting Collecting Coloring Communication Community activism Community Radio Computer programming Confectionery Conlanging Construction Cooking Cosplaying Couponing Craft Creative writing Crocheting Cross-stitch Crossword puzzles Cryptography Cue sports Dance Decorating Decorative birds Digital arts Dining Diorama Distro Hopping Diving Djembe DJing Do it yourself Drama Drawing Editing Electronic games Electronics Embroidery Engraving Entertaining Everyday carry Experimenting Fantasy sports Fashion Fashion design Feng shui decorating Filmmaking Fingerpainting Fishfarming Fishkeeping Flower arranging Fly tying Foreign language learning	Furniture building Gaming (tabletop games, role-playing games, Electronic games) Genealogy Gingerbread house making Giving advice Glassblowing Gardening Gongfu tea Graphic design Gunsmithing Hacking Hairstyle Hardware Herp keeping Home improvement Homebrewing Homing pigeons Houseplant care Hula hooping Hydroponics Ice skating Inventing Jewelry making Jigsaw puzzles Journaling Judo Juggling Karaoke Karate Kendama Knife making Knitting Knot tying Kombucha brewing Kung fu Lace making Lapidary Leather crafting Lego building Livestreaming Listening to music Listening to podcasts Lock picking Machining Macrame Magic Makeup Manga Massaging Mazes (indoor/outdoor) Mechanics Meditation Memory training Metalworking Miniature art Minimalism Model building Modeling Model engineering Music Nail art Needlepoint Origami Painting Pen Spinning Performance Pet sitting Philately Photography Pilates Pipes Planning Plastic art Playing musical instruments Poetry Poi Pole dancing Postcrossing Pottery Practical jokes BASE jumping Proofreading and editing Proverbs Public speaking Puppetry Puzzles Pyrography Quilling Quilting Quizzes Radio-controlled model playing Rail transport modeling	Rapping Reading Recipe creation Refinishing Reiki Reviewing Gadgets Robot combat Rubik's Cube Scrapbooking Scuba Diving Sculpting Sex Sewing Shitposting Shoemaking Singing Sketching Skipping rope Slot car Soapmaking Social media Speed running Spreadsheets Stamp collecting Stand-up comedy Storytelling Stretching String Figures Stripping Sudoku Talking Taekwondo Tapestry Tarot Tattooing Taxidermy Telling jokes Thrifting Upcycling Video editing Video game developing Video gaming Video making VR gaming Wargaming Watch making Watching documentaries Watching movies Watching television Wax sealing Waxing Weaving Webtooning Weight training Welding Whittling Wikipedia editing Wine tasting Winemaking Witchcraft Wood carving Woodworking Word searches Worldbuilding Wikipedia racingWikiracing Writing Writing music Yo-yoing Yoga Zumba	Outdoors and sports Air sports Airsoft Amateur geology Amusement park visiting Archery Auto detailing Automobilmism Astronomy Backpacking Badminton BASE jumping Baseball Basketball Beachcombing Beekeeping Birdwatching Blacksmithing BMX Board sports Bodybuilding Bus riding Camping Canoeing Canyoning Carrier pigeons	Car riding Car tuning Caving City trip Climbing Composting Croquet Cycling Dairy Farming Dandyism Darts Dodgeball Dog training Dog walking Dowsing Driving Farming Fishing Flag football Flower growing Flying Flying disc Flying model planes Foraging Fossicking Freestyle football Fruit picking Gardening Geocaching Ghost hunting Gold prospecting Graffiti Groundhopping Guerrilla gardening Gymnastics Handball Herbalism Herping High-power rocketry Hiking Hobby horsing Hobby tunneling Hooping Horseback riding Hunting Inline skating Jogging Jumping rope Karing Kayaking Kite flying Kitesurfing Lacrosse LARPing Letterboxing Lomography Longboarding Martial arts Magnet fishing Metal detecting Motorcycling Meteorology Motor sports Mountain biking Mountaineering Museum visiting Mushroom hunting/mycology Netball Noodling Nordic skating Orienteering Paintball Paragliding Parkour Photography Pickleball Picnicking Podcast hosting Polo Powerlifting Public transport riding Qigong Radio-controlled model playing Rafting Railway journeys Railway modelling Rappelling Renaissance fair Renovating Road biking Rock climbing Rock painting Roller skating Roundnet Rugby Running Safari Sailing Sand art Scouting Scuba diving	Sculling or rowing Shooting Shopping Shuffleboard Skateboarding Skiing Skimboarding Skydiving Slacklining Sledding Snorkeling Snowboarding Snowmobiling Snowshoeing Soccer Stone skipping Storm chasing Sun bathing Surfing Survivalism Swimming Table tennis playing Taekwondo Tai chi Tennis Thru-hiking Topiary Tourism Trade fair visiting Travel Unicycling Urban exploration Vacation Vegetable farming Vehicle restoration Videography Volleyball Volunteering Walking Water sports Zoo visiting	Knife collecting Lapel pins Lotology (lottery ticket collecting) Movie memorabilia collecting Perfume Philately Phillumeny Radio-controlled model collecting Rail transport modelling Record collecting Rock tumbling Scutelliphily Shoes Slot car Sports memorabilia Stamp collecting Stuffed toy collecting Tea bag collecting Ticket collecting Transit map collecting Video game collecting Vintage cars Vintage clothing Vinyl Records Outdoors Antiquities Auto audiophilia Flower collecting and pressing Fossil hunting Insect collecting Leaves Magnet fishing Metal detecting Mineral collecting Rock balancing Sea glass collecting Seashell collecting Stone collecting	Competitive hobbies Indoors Air hockey Animal fancy Axe throwing Backgammon Badminton Baking Ballet dancing Ballroom dancing Baton twirling Beauty pageants Billiards Book folding History Linguistics Literature Mathematics Medical science Microbiology Mycology Neuroscience Philosophy Physics Psychology Railway studies Research Science and technology studies Social studies Sociology Sports science Story writing Life science Teaching Web design	Volleyball Video gaming VR gaming Weightlifting Wrestling Outdoors Airsoft Archery Association football Australian rules football Auto racing Baseball Beach volleyball Breakdancing Climbing Cornhole Cricket Croquet Cycling Disc golf Dog sport Equestrianism Exhibition drill Field hockey Figure skating Fishing Fitness Footbag Frisbee Golfing Handbal Horseback riding Horsemanship Horseshoes Iceboat racing Jukskei Kart racing Knife throwing Lacrosse Longboarding Long-distance running Marching band Mini Golf Model aircraft Orienteering Pickleball Powerboat racing Quidditch Race walking Racquetball Radio-controlled car racing Radio-controlled model playing Roller derby Rugby league football Sculling or rowing Shooting sports Skateboarding Skiing Sled dog racing Softball Speed skating Squash Surfing Swimming Table tennis Tennis Tennis polo Tether car Tour skating Tourism Trapshooting Triathlon[216] Ultimate frisbee Volleyball Water polo	Observation hobbies Indoors Audiophile Fishkeeping Learning Meditation Microscopy Reading Research Shortwave listening Outdoors Aircraft spotting Amateur astronomy Benchmarking Birdwatching Bus spotting Butterfly watching Geocaching Gongoozling Herping Hiking/backpacking Meteorology People-watching Photography Satellite watching Trainspotting Whale watching
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tion; business—people will have the time to pursue their own business pursuits; hobbies/crafts; gardening and landscaping

Any and all activities that humans like to do—these will be fully accessible during the ample free time.

The agreement/contract

Upon joining 1Example-Ville, residents would be required to understand and agree to this requirement beforehand. This includes the need to work on common needs, the agreement to respect and protect the local biodiversity, and also, the rules of conduct which by and large would be that golden Rule (treat others how you would like to be treated).

Similar as to when one enters say Disneyland, your purchase of a ticket includes your agreement to behave and obey the rules. In this way, everything about the community; all of the expectations, rules and regulations would be made crystal clear from the beginning.

This type of transparent rule system is how I envision I would want to live with friends, family and guests. Each group/organization that was to purchase/develop a 1Example-Ville would be able to adjust these rules and agreement to their liking. The 1Example-Ville development team would be there to provide expert assistance and advice in this area, helping each group to reach their ideal.

No quirky leaders to follow

With 1Example-Ville, there will be no leader(s) to follow. Instead, the entire group will be working cooperatively on maintenance of their own common needs, the process for which, will have been pre-determined in the testing phase and made clear in advance. So no secret or unnecessary agendas to follow. There would be plenty of social opportunities at 1Example-Ville, but everyone would be free to participate or avoid these as they see fit.

First things first: *Food, shelter and energy*

This is the primary focus—to make sure that we have enough of what we truly need—food, shelter and energy. Therefore, even if all else fails, the residents would still be meeting their basic needs. In contrast, I know of one famous intentional Community that focuses on making and selling hammocks to make ends meet. That's great and all, but when hammock sales are down, are they also edible?

Automation and Robotics

One problem that we have in our current society is that we are increasingly losing our jobs to automation, artificial intelligence, robots and similar technologies.

With a hybrid economy, however, those living at 1Example-Ville will not have to fear technology, automation or robots, because now, rather than stealing our jobs, they will be doing our jobs. Automation is only a problem when one person owns all the robots, leaving the rest of us out of work. But when the entire community owns the machinery, this technology simply means that our residents will have less 'chores' to do—which is a good thing.

For example: plant/food production, at the heart of 1Example-Ville as one of our greatest common needs, will be something that all residents will be required to work on. With today's technological abilities, we should be able to turn this chore into one that is nearly 100% automated, right down to harvest and delivery.

1Example-Ville Conclusion

I believe that such a community as 1Example-Ville, were it to be constructed, would go a long way to a) being that 'deeper shade of green' that we ecovillages are lacking and b) a pretty cool place to live. Of course this is all just a rough hypothesis. We need to get to the testing.

I urge all bright young minds out there to start designing even greener, cooler communities.

A few other things

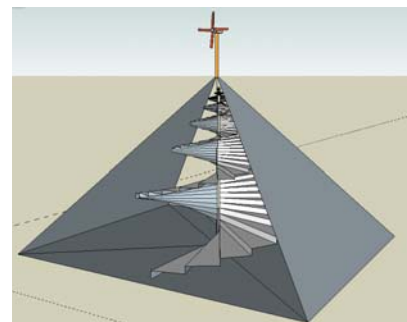
Here are a few innovations of 1Example-Ville in more detail:

The Seed

The first innovation is what I call 'the seed' as it would be the starting point of our flower shaped community. On it's own, it would be a perfect type of relief shelter for refugees, the homeless, the poverty-stricken, and third world peoples in need.

This pyramid-shaped 'seed' is designed to supply food, shelter and energy for a small group of people and has many innovative features:

- Acts as a rain catcher
- Has potential for fully automated growing
- Crops could be grown on the inside or outside – greatly increasing output by as much as twenty times per acre or more.
- Compared to other structures, the pyramid shape is easily to set up and stable.
- Simple but effective structural design: more like an umbrella, so it is safe in that it will not crush you if it were to fall. It also does not require a frame in the beginning—just a pole with four stabilizing cables.
- It is versatile in that it can either have a centre pole, or no centre pole – making the vast space open and useful for many things: building large things, concerts, gatherings, sports fields



- It could be used for hanging and rotating things in it's centre – which makes it useful for growing (a rotating helix filled with plants) so it can rotate with the sun for optimal exposure. It could also support a giant concave reflector for use as a solar oven.
- This same giant helix could serve as a power generator, fed by the wind. This same wind could be used to turn a centre pole so that it can drill down into the earth – this would be useful for reaching hotspots, geothermal heat, or water wells.
- The shape is good for snow loads as snow will not accumulate.
- The shape is wind resistant so protects against hurricanes. Farmers can put it over an existing farmhouse, barn, or field full of animals, saving lives as well as billions in property damage.
- It can be used to reclaim the desert. Used in the desert, along with products like humic acid, these pyramids could turn the desert, as well as the rest of the world, into a lush garden.
- It has been reported that a double layered pyramid shape would work to create air currents, resulting in an automatic cooling mechanism.

These pyramids can be built mainly from hemp and ETFE with the ability to be quickly set up virtually anywhere on the planet—perhaps designed to fold open as easily as a giant umbrella. A large truck custom designed for this job could raise the 50 metre centre pole (made of hemp fibre composite) and secure it to the ground. The truck could also feasibly drill down to access geothermal heat and water resources below.

From it's top, this hemp pole would be supported by four hemp-fibre stabilizers, anchored securely to the ground using

'hemcrete' and/or earth-screws, forming our pyramid shape. As soon as this structure is up, the ETFE could be attached. It might also already be a built-in part of the pre-fabricated umbrella design.

As mentioned, this 'seed' pyramid could also be outfitted with four alternative energy suppliers: one or more wind turbines; solar panels, geothermal heat from the ground, and a solar oven.

Presto, our residents would have a warm and dry place to live and work with all of their food needs met by a high-tech greenhouse that is lighted and heated by the sun.

Although a group could stay living inside this structure with the plants, they might likely want to move out. The large covered space of the pyramid would make an ideal workshop in which to build the rest of the community. Firstly, more pyramids might be set up with our 'pyramid planter' truck.

The *food pyramid* would have plants growing with aeroponics (down the sides of the pyramid) and vertical farming on the inner helix, all automatically operated. The helix would rotate to ensure that plants were evenly exposed to sunlight. On the bottom level, trees of all types and sizes could be grown and animals could graze here. Being in an enclosed space, this might solve the methane problem that cows reportedly pose.

The *shelter pyramid* would likely have many levels, connected by a helix stairwell, with advanced models having an elevator up the middle (not necessary though). With kitchens, sleeping, dining, living, entertaining areas. The bottom could be used for soccer matches, big parties, music festivals, with the helix providing great spectator views from above. The ETFE walls would be capable of changing from clear to opaque; or, you could just use 'blinds' for different areas.

The *energy pyramid* would have the giant windmill on the inside; possible solar panels or a solar oven; connected to geo-thermal; all

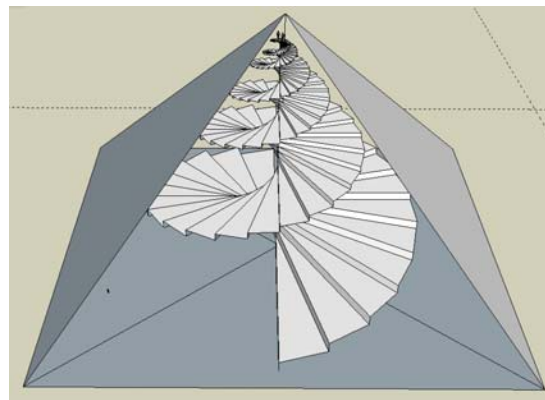
of these pyramids would also work as rain catcher/filtration units, providing fresh water for plants and humans.

All of the pyramids built initially would go on to form our 'leaf' section of the community. Just as leaves are like the power house of a plant, similarly, they are like our community's energy/industrial zone. From here, the rest of the community could unfold, and not just pyramid shapes.

An example of Ephemeralization

Ephemeralization, a term coined by R. Buckminster Fuller in 1938, is "the ability of technological advancement to do more and more with less and less: achieving the same or more output (products, services, information, etc.) while requiring less input (effort, time, resources, etc.)"

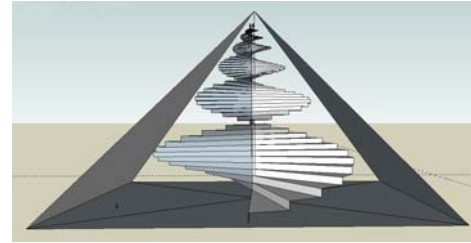
One example of ephemeralization that I have detected involves these pyramid greenhouse; the larger we make it, the more efficient it becomes. For example, if you were to combine 64 pyramid greenhouses into just one—like magic, that one new large greenhouse would be capable of containing 512 of those same size greenhouses! That's eight



times more with the same amount of material. This extra space can then be utilized by using something like the inner double-helix shape (pictured here). In the greenhouse pyramid, this space could be used for further bio-intensive agriculture, increasing production by 20 times or more!

I believe that the double helix shape might also perform nicely as a vertical wind turbine / power generator. In that case, you would hang the double-helix shape from below a pyramid that has the four 'legs' in place; without the ETFE covering. This would create a

huge vertical wind turbine that in a windy place, like say the Canadian prairies, this might generate a phenomenal amount of energy.



Yes, it all needs to be tested, but before we move on—I want to convince you that this pyramid shaped structure is not completely mad. With few pyramid shaped structures around these days, they do seem rather far out, but here are two modern examples of giant pyramid structures:

I found the following on the internet: plans for a giant pyramid shaped greenhouse that is “an Innovate UK project and is partnered with both Nottingham and Nottingham Trent Universities.”

The pyramid shape greenhouse Eco-friendly vertical farm

The planned greenhouse will consist of a series of 25-meter-high pyramid greenhouses with a length of 50 meters of each border.

The innovation of the pyramid greenhouses was inspired by the Egyptian pyramids. The shape of this natural element is strong and resistant and unraveling energy mystery. The innovative greenhouses adopt the shape of a pyramid, in addition to the appearance, but also has the effect of promoting growth and take full advantage of the vertical space.

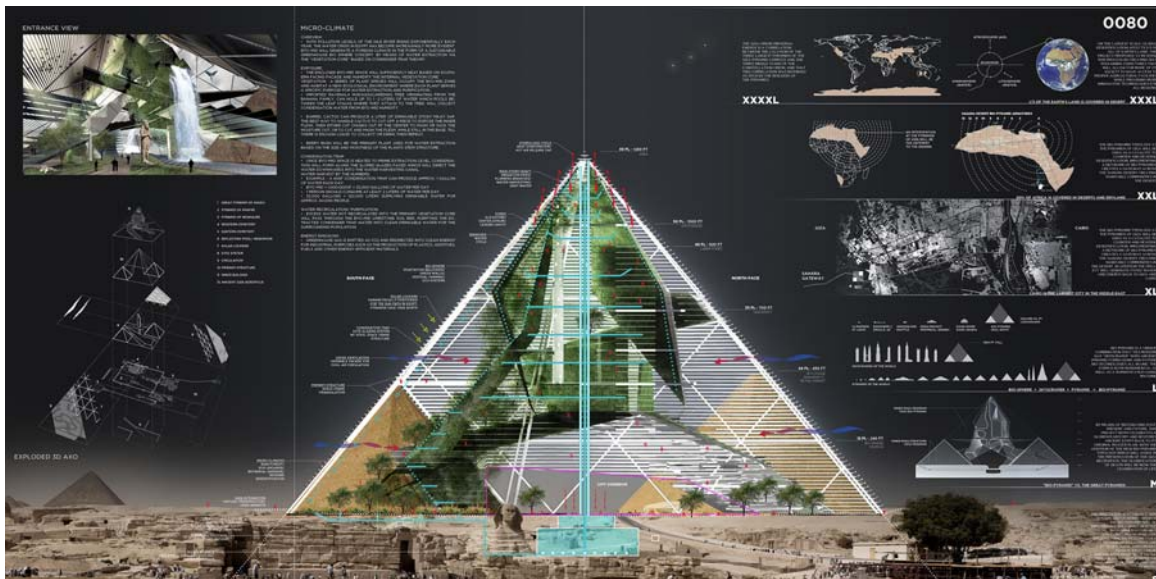
The greenhouse utilizes the spatial truss structure of the honeycomb in the external to form a strong point-surface resistance. In addition, the top-cone structure is also conducive to the hot accumulation of hot air in greenhouses, which is more conducive to vertical ventilation and chimney effect so that no ventilation fans are needed at all. The smooth four slopes of the pyramid also facilitate the

coverage of hard materials such as polycarbonate hollow sheets, and can also install a certain percentage of solar panels to solve part of the electricity for greenhouse production.

Aeroponic and aquaponic systems will be built inside and the overall production efficiency will be 20 times as per the same area on a traditional farm, and it is sustainable agriculture which uses zero insecticides and 90% less of water. It also costs significantly less than widely used Dutch-style greenhouses.

So that is one example of external evidence in support of the reasoning behind a giant pyramid-shaped greenhouse.

The second example is called a Bio-pyramid, It too is designed with ETFE; is very large (1280 ft tall) and is described as a 'sophisticated living machine' - a self sustaining structure that can generate food, water and energy.



The 'Bio-Pyramid: Reserving Desertification' proposal won an honorable mention in the 2015 eVolo Skyscraper Competition and was designed by David Sepulveda, Wagdy Moussa, Ishaan Kumar, Wesley Townsend, Colin Joyce, Arianna Armelli, and Salvador Juarez.

It is designed to reverse desertification and create habitable regions in desert areas by working as a 'condensation trap' that collects water inside the dome. This Bio-dome could produce 32,000 gallons per day, enough drinking water for 60,000 people. Can also trap greenhouse gases and redirect them into a clean energy source.

So there you have it folks, two other examples of giant pyramid structures as designed by reputable people. The first one was having trouble finding permission by local authorities and the second one is likely too ambitious and large to ever succeed.

Waterway transport

Another energy/work saving innovation would be the use of waterways/canals for transportation of items; perhaps even people.

In the case of food transport, once food has reached maturity in the leaf/greenhouse area, it would be loaded into floating transport balls (that can roll even without water, just gravity) and transported via water canal to where it needs to go. An electronic label on each ball would work, via Bluetooth, to either open or close gates along the canal network, directing the ball to its destination.

In this case, food from the leaf/greenhouse section would be directed to one of the many kitchen areas of the community. Here it would be either stored and or processed for future use in the kitchen.

Clothing Machine

Now here is a bit of an innovation that I have been working on . The residents would have their own personal clothes – that which we keep in their individual homes. They would also have access to a large storehouse of clothing and costumes of all types and

sizes. So if you feel like dressing up as a Roman gladiator for dinner one evening, just order it up on the 1Example-Ville system (website) and it will arrive at your residence via the automated waterway delivery system (in a floating plastic bubble).

Once worn, dirty clothes are packed in the bubble for export back to the clothing centre where it will be automatically washed, folded and put away for use by the next person. Not only would such an invention save on time and labour, it could also hopefully do so much more efficiently.



So these are just a few examples of the countless innovations that will hopefully be getting developed soon in one of Earth's new community laboratories where, following the scientific process of continual adaptation (plan, test, measure, repeat), our experts would be monitoring and improving every facet of the system.

Does this plan for the planet and/or 1Example-Ville contain solutions to each of the five categories identified by the Earthshot Prize? I think yes.

Protect and Restore Nature

Each community SC will be like a guardian of the nature that surrounds it. We will not be destroying nature to create these communities—but using permaculture, we will be living amongst nature; in tune with nature. We will have wild animal shelters and lookouts—for fires– catching them before they get out of control. Our educated residents will also have signed an agreement to do their part to protect and restore the local environment.

Clean our Air

Because we are largely promoting a car-free society—with little to no pollutants, this will of course help our air quality. Also, the idea to have the animals grazing at the bottom of the giant pyramids means that the methane they produce would be captured.

Revive our Oceans

Using aeroponics, which use 90% less fertilizer, and using natural resources such as humic acid—we can eliminate the harmful chemicals that leach into our waterways and oceans.

Build a Waste-free World

Each sustainable community will be designed so that there is virtually zero waste being emitted.

Fix our Climate

No cars; trapping methane gas; eco-friendly building materials; locally sourced materials—these will all help to reduce the amount of harmful gases that go into our air, thus helping to fix our climate.

Does this plan contain answers to: poverty, hunger, fear, unemployment, inequality, tyranny, pandemics, and hurricanes? I think it does.

Poverty and hunger

Every resident will be guaranteed their basic needs from cradle to grave: food, shelter, energy. Thanks to our hybrid-economy, where we focus on 'first things first', these three things will always be covered.

Fear

A lot less fear. Residents will not have an impending sense of fear based on, homelessness, joblessness, poverty, hunger, crime, stock market crashes, radiation, hurricanes or power outages.

Unemployment

Again, the hybrid economy takes care of this. Also, the downside of automation (robots taking over our jobs) will be eliminated, as any automation will now be a benefit to the community.

Inequality

I tried to design 1Example-Ville so that there would be equality amongst residents. How can this occur? The design will have been largely pre-determined by the experts and scientists who, in turn, will have be guided by the test residents during testing. In this way, short of fairly minor improvements (suggested by residents), most wrinkles will already have been worked out.

As I was planning this system, I wanted one that would be as fair as possible for my closest friends and family. I certainly wouldn't want to have power over the people there, and I wouldn't want others to have power over me. Therefore—everything about the design is tested to be as 'pre-emptive' and transparent as possible—designed to keep residents on course, happy, healthy, out of trouble, with maximum free time and as little interference or obligation as possible. For us, by us.

The advantage of this pre-emptive planning is that it remains stable. It is not at the mercy of the constant changes by politics and politicians. Like Disneyland, you go there for a good time, not to change things. Same as life at 1Example-Ville, you go there to enjoy life—not to tear apart the system. The advantage of small communities is that, if some person or group really wants to see change, it is easier to just build a new one with the new features.

So that's equality. The alternatives—maybe a police state like the ones being developed in China. We also have those run by the charismatic leaders—much like a fascist system, or the ones that are at the whim of politicians who promote constant change for change's sake.

I have a quick story about a Kibbutz. I've never been to one, but I have a Jewish friend who stayed on one for awhile. She said that the person who was in charge of telling her what her daily chores were told her they might be a lot easier if she did stuff with him of a sexual nature. Now I am sure this is not the case with every Kibbutz, but in general, since power creates abuses of power, this is a problem everywhere and our SC's need to avoid such inequality. Had my friend's daily chores been decided preemptively; fairly and objectively through the process of logic (rather than by the individual selfish desires of a 'manager' or 'boss') than this type of abuse could not occur.

Tyranny

I am specifically thinking about the type of Tyranny that a dictator or extremist political party can do to a community.

1Example-Ville will not sway in the wind of the whims of politics and politicians, so residents will not need to worry that their peaceful, abundant way of life will suddenly change.

And if the threat of tyranny is more of an immediate and physical danger, than the self sufficient and protected

(enclosed) community would also have other (top secret) ways of protecting itself. Thinking positively though, I hope that enough SC's or 1Example-Ville's could be produced to satisfy everyone.

Pandemics

We are all now quite familiar with pandemics. Imagine how much more easily one would be to contain and control if we all lived in communities such as 1Example-Ville.

For one, we would not have the supply chain issues for food or anything else because our SC would be largely self sufficient.

Secondly, being self sufficient, each community could afford to do a much better job of isolating itself. The ability to monitor whoever enters and leaves the community would really pay-off in a pandemic situation. People could further isolate within their communities by staying a) within their neighbourhood or b) at their individual residence where everything can be delivered by water delivery system.

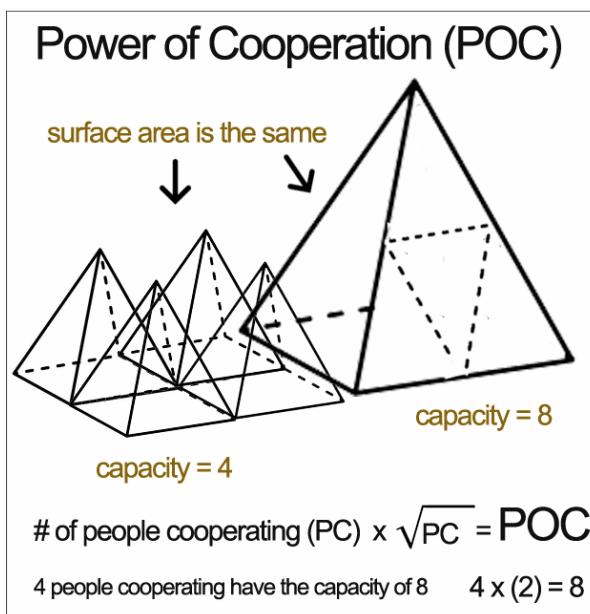
Hurricanes

As mentioned, another advantage of the pyramid shape is that it highly wind resistant. Were it to be anchored down sufficiently and made virtually air tight, even the strongest of hurricanes would pass harmlessly by. For this reason alone, I think that we will see farmers in hurricane prone areas erecting such giant pyramids simply as protection for their buildings, crops and live-stock during a hurricane.

The Power of Cooperation

I stumbled upon a theory during my time studying pyramids that I have been calling the *Power of Cooperation* formula.

Say four people each had an equal sized shelter (let's say a pyramid shaped tent), and that each of these tents could contain let's say one bushel of wheat. We would then see that those four people could, collectively, provide shelter for four bushels of wheat - one per shelter. Are you with me?



Next, say that it started to rain and these poor four people needed all of their wheat to stay dry.... But WAIT! They have harvested not four, but eight bushels of wheat to keep dry. With just the four shelters, but eight bushels to cover, what can they do? Well, if those four people were to work together - they could, by the magic power of cooperation, cover all eight bushels.

How you might ponder? Well, by rearranging their pyramid tents in such a way, so that each tent now formed one side of a larger pyramid, then that newly formed, larger pyramid would be large enough to cover all eight bushels of wheat. We can clearly see that it is only by working together that those four people are able to double their capacity.

This doubling of capacity increases as the number of people working together increases. The actual formula is very simple, where you take the number of people cooperating (in this case, 4) and multiply it by the square root of that number (in this case,

2) which comes out to, as we have seen in this case, 8.

We can then see more clearly just how amazing it is when large groups of people cooperate. 100 people working together have the power of 1000. 10,000 people working together would have the same power as 1 million individuals working separately!

1 person	= 1 power (1 each)
4 people (working together)	= 8 power (2 each)
16 people	= 64 power. (4 each)
64 people	= 512 power (8 each)
256 people	= 4,096 power (16 each)
1024 people	= 32,768 power (32 each)
4096 people	= 262,144 (64 each)
16384 people	= 2,097,152 (128 each)

So there you have my Power of Cooperation formula. It does seem to show mathematically how cooperation can give a group of people power beyond what they could achieve individually.

For 1Example-Ville, that means that our 1000 residents working together in cooperation would have about the same capacity as 31622 people working individually. If everyone in the 1Example-Ville Network were to cooperate further, then we would see the creation of extreme capacity building, resulting in less stress on people and the planet. Amen