

EnviroIngenuity is an environmental technology company comprised of a diverse group of business professionals whose unique skill sets makes it possible to develop environmental solutions that are both ecologically sound and profitable.

HydroSynthesis technology embraces the concept of high efficiency, digitally controlled, on and off-the-grid hydroponic vertical food production within the urban environment. Primary attributes of the system are:



» **Lower Operating Cost + Natural Resource Savings:**

Vertical organic food production processes use 90% less water, 80% less fertilizer and require 85% less land to produce greater quality and up to 20 times more food per acre and than traditional farming yields.

» **Lower Consumer Food Cost:**

When sold through local distribution channels near the original food production site, vertical farming eliminates several middle-men, allowing for the locally grown food to be sold for less, yet maintain very healthy profits for the growers.

» **Urban Economic Benefits:**

Urban locations with lots of unused commercial office and warehouse space are perfect to convert to fast-growth, high-yield vertical farming of organic produce, such as lettuce and tomatoes and other crops from wheat germ to decorative plants and flowers. Unused buildings can generate rental income and be converted at a minimal cost, all without any environmental contamination. Converting existing structures greatly reduces the carbon footprint, plus crops absorb CO₂, creating a healthier, higher level of community well-being by improving the quality of life.

» **Earth-Friendly Renewable Energy:**

The design incorporates sustainable energy production in the form of solar PV, solar water heating and thermal conditioning. The process will also utilize hi-efficiency LED lighting designed specifically to deliver the optimal wavelength of light to maximize photosynthetic activity during each growing cycle.

» **Major Reduction in Greenhouse Gases:**

As a direct benefit of our local growing and distribution practices, our process substantially reduces agribusinesses' carbon footprint because produce is consumed locally and requires no shipping. This advantage increases overall cost savings by reducing energy consumption and virtually eliminating the requirement to burn fossil fuel.

» **Better Tasting Superior Quality Food:**

The system shortens the delivery time from harvest to consumption, allowing for food to be ripened "on the vine," providing a huge taste benefit. Properly nourished vertically grown organic produce delivers more nutrients and oxidizes 50% less than traditionally farmed produce, plus virtually eliminates the chance of contamination by food pathogens such as E-Coli.

» **Indirect Global Benefits:**

Locally grown organic food is healthier, delivering more valuable nutrients to consumers that eat our produce, which provides substantial long-term health benefits to combat all kinds of ailments such as diabetes. This in turn extends life expectancies which saves billions in medical care.

» **Direct Community Benefits:**

Economic benefits arise from the sale of produce to local residents. By educating local communities how to feed themselves in developed as well as third-world countries, we create local jobs and reduce the amount of international food subsidies required. These savings can be reinvested into hi-efficiency direct food production, allowing communities to feed themselves and become independent of external financial assistance. Integrating existing technologies into a powerful system and distributing knowledge how to efficiently feed people creates powerful "good will" that will result in greater global cooperation on many fronts.

» **Organic Production:** The system eliminates the requirement to treat produce with unhealthy, inorganic pesticides and herbicides and other potential carcinogens that are absorbed into the root systems and also leach back into our fresh water supply.

SUMMARY

HydroSynthesis moves closer to solving one of humanity's greatest challenges: to increase healthy local food production. Our food production and delivery techniques are efficient, scalable and consume less energy. Our business model demonstrates low operating costs, creates local jobs and provides alternative uses for enclosed containers and empty or under-utilized commercial buildings by making them revenue producers. HydroSynthesis increases overall yields of higher quality fruits and vegetables and drastically reduces the amount of water, fertilizer, energy, transportation, packaging and land that a traditional farm requires, creating a unique business opportunity.