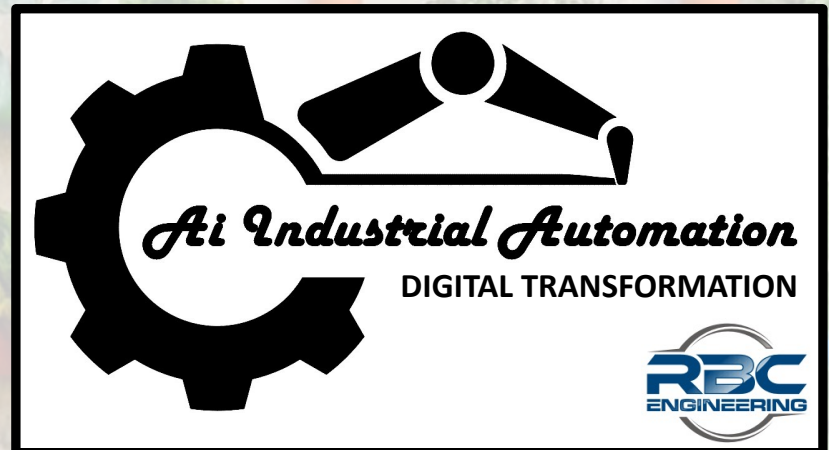


# Smart Vertical Farming

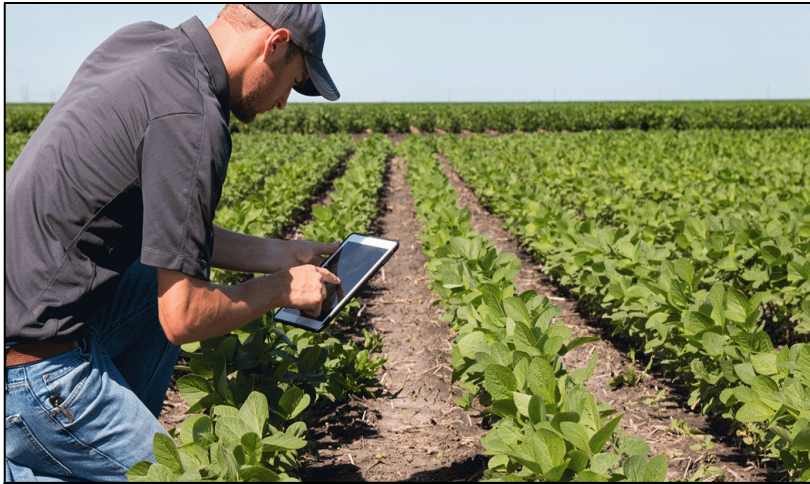
Controlling Yield Effectively, Efficiently & Organically



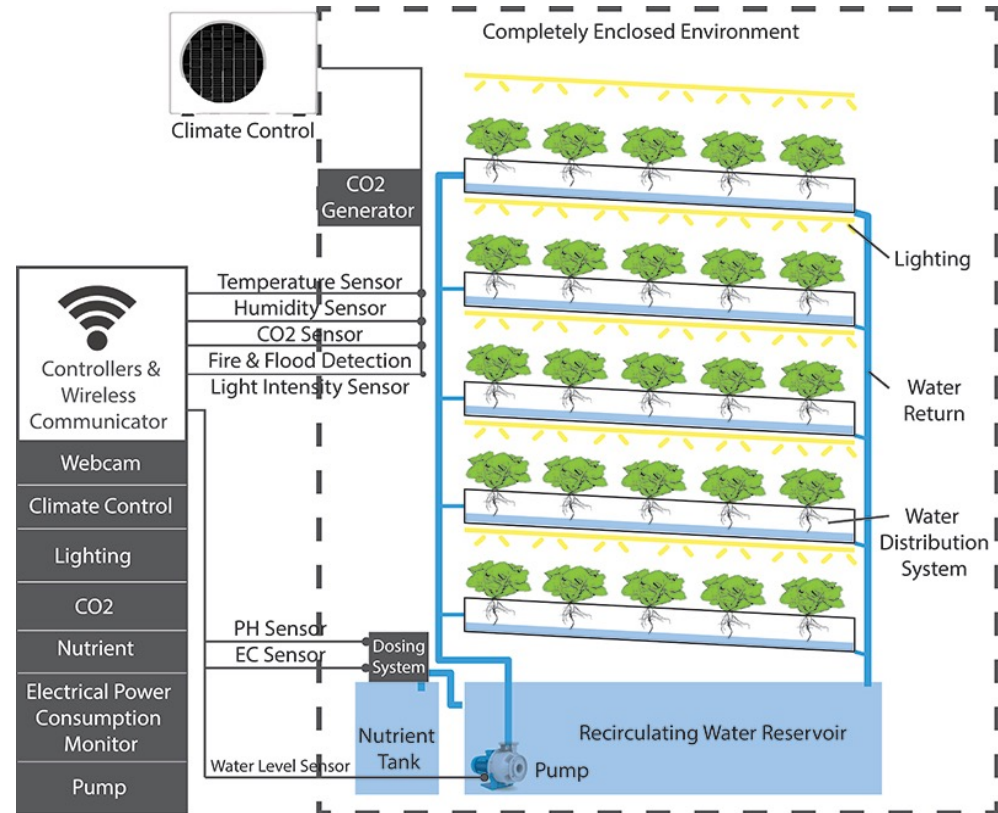


- **Smart Vertical Farming** is a pre-engineered easy-to-operate system that produces fresh plants like lettuce or animal feed in any climate, effectively, efficiently and organically.
- The 300 square foot layout of a 40-foot shipping container makes for easy maintenance and harvesting of up to the same amount of produce as one acre or more of land with traditional farming methods. Plants or animal feed can be grown using 95 per cent less water and use up to 30 per cent less energy than an outdoor soil-based farm with similar yields.
- Hydroponics is a system of growing that is used in vertical farming and is free from soil and harmful weather conditions. Instead, seedlings take root inside grow plugs made of moss. Once the seedlings grow large enough, they are transplanted into vertical towers shown in the picture. **Vertical farming can be cultivated right inside your barn to feed your livestock.**
- Farmers purchase as an investment, additional to their current outdoor or dairy farming operations to guarantee yield and provide fresh produce or feed year-round. The produce and animal feed can be sold and delivered locally and to other farms through third-party services, similar to Uber Eats or smart APP's that are monitored by your smartphone.

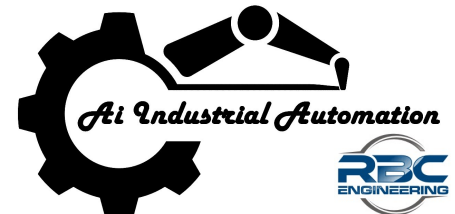




**Internet-of-Things (IoT)** tech is providing real-time monitoring of both traditional and urban farming systems. This enables farmers to reduce waste and enhance productivity.



- IoT-based “Smart Farming” can control and monitor light, humidity, temperature, PH levels, CO2, flow and temperature of water, soil and more using sensors. These sensors alert and manage automated fertilizer and MRO (maintenance, repair, and operations) systems to apply the quantities needed and inform farmers as required.
- Monitor return-on-investment (ROI), sales pipeline, yield of crop, cost of electricity being utilized and even the carbon cost footprint, all from an APP that can be controlled by your smartphone.
- The APP can double as a classroom where farmers or students can learn about biology, nutrition and distribution.



**RBC Engineering** is a General Contractor and leader in IoT through Industrial Automation.

Since 2008, we have been building our portfolio as a leader in **Industrial Automation through Digital Transformation** in the Saskatchewan, Manitoba, Alberta and NWT areas. We have had the opportunity to work under contract with some of the leaders in the industry including Saputo, Dairyland, Nutrien, Cargill, several local farms (grain and dairy), and more that have implemented robotics and industrial automation. Our goal is to deliver **value added solutions** to our clients so they can maintain **Operational Excellence**.

**Controlling Yield, Effectively, Efficiently & Organically through Digital Transformation**

Please visit us on our website [www.rbcengineering.ca](http://www.rbcengineering.ca) and call, text or email to learn more...

Please also check us out on youtube... <https://youtu.be/UcMeS4OdVYc>

Regards,

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