# Advantages of Vertical Farming



Maximum crop yield



Lesser space for crops



Reduces transporation cost



Food grows organically



Uses minimal water



Cheaper in the long run

	Vertical Farming	Traditional Farming
Land Use	Small space friendly, vertical farming	Large areas of farmland, horizontal farming
Water Use	Fewer water resources are used	Water use can vary, but generally, is higher
Energy Use	Often high energy use (but renewable)	Moderate energy use (if well managed)
GHG Emissions	Relatively low GHG emissions (with the right strategies)	Relatively high GHG emissions
Pollution and Ecosystem	Minimal pollution and ecosystem degradation	Most farming damages the environment
Supply Chains	Decentralized food production system	Centralized food production system

## **Vertical Farming**

Good, but

**Energy Consumption** 

High

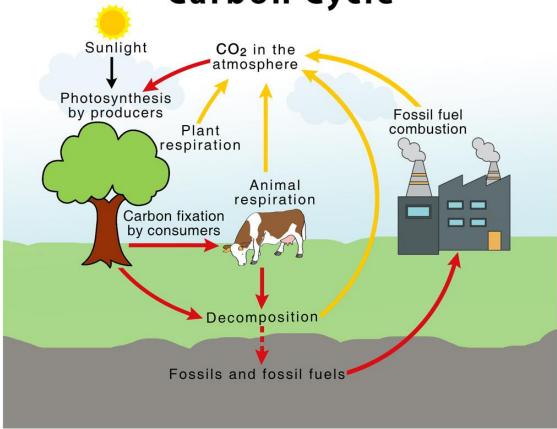
Solution ?

**Partnership** 

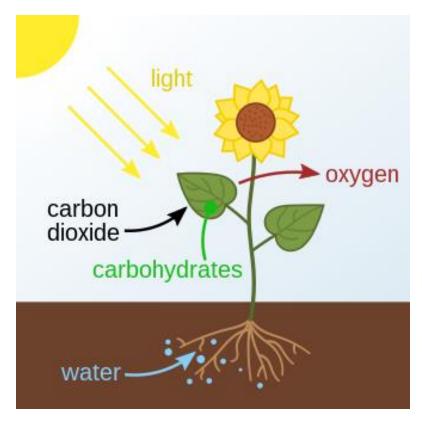


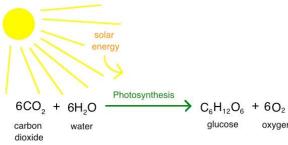


#### **Carbon Cycle**



#### **Photosynthesis cycle**













### **Partnership**





**Energy Consumption** 



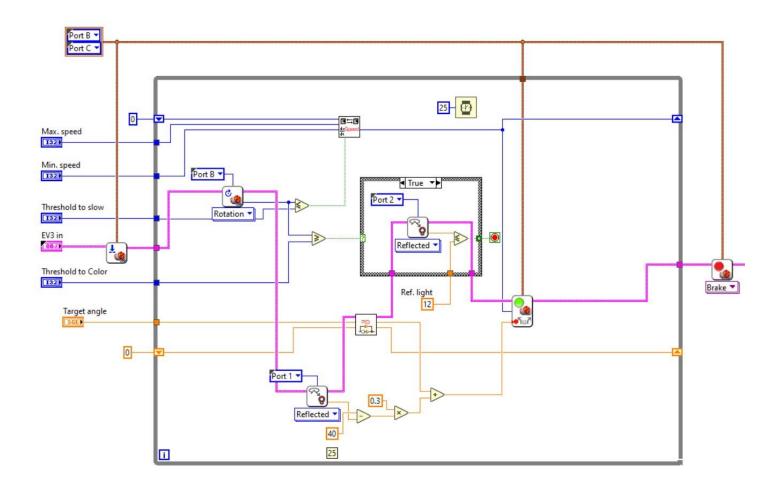
**GHG Emissions** 

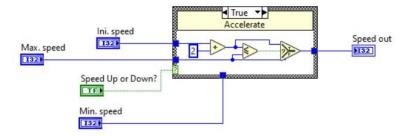
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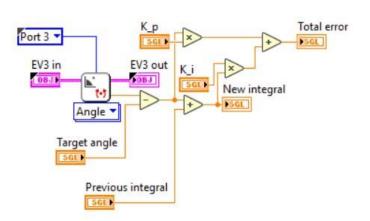


# **Exploration**

**Carbon Capture in Vertical Farming** 









Underlying program of EV3-G