



FARMING FOR GOOD

A complete guide for using the **Greenery™** to bring fresh food to communities worldwide.





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FREIGHT FARMS BASICS

The Growing Platform

We're proud to offer you a plug-and-play system designed to make hydroponic farming accessible to everyone, regardless of prior farming experience.





The Greenery™

A commercial-grade, vertical, hydroponic farm built inside of a 40-foot shipping container and outfitted with environmental controls and indoor growing technology.

farmhand®

Farmers can grow with confidence using farmhand®, our automation software. With farmhand®, farmers can monitor and control the Greenery™ remotely, as well as analyze data to create the optimal growing conditions.

Client Services

Our top priority at Freight Farms is the success of our customers. The Client Services team ensures that every new farmer has the tools and training needed to run a smooth operation.

FREIGHT FARMS BASICS

Site Requirements & Preparation

The Greenery™ is compact and mobile. It needs only a few simple site requirements to make it operational, meaning it can be placed in a variety of urban, commercial, or residential locations.





Choose a Site

- DIMENSIONS** The Greenery™ is 40 ft. x 8 ft. x 9.5 ft. We recommend an overall site footprint of 50 ft. x 10 ft. to safely enter the farm.
- SURFACE** Select level ground with a maximum 3% grade. Most Freight Farmers select pavement, but trap rock, railroad ties, sonotubes, or a concrete pad are also acceptable.
- UTILITIES** A water source should be within 50 ft. of the farm, and an electrical source should be nearby for easier installation.



Lay the Groundwork

- ELECTRICAL SPECS** A licensed electrician should install or hardwire a 100 amp, 120 volt split-phase connection (120/208 volt three phase is also acceptable.)
- WATER SUPPLY** Simply soft-plumb using a hose, or hire a licensed plumber to hard-plumb the water supply. We recommend insulated pipes for regions that experience freezing temperatures.
- WATER QUALITY CHECK** If using municipal water, acquire annual reports to ensure your water meets GAP food safety standards. Well or surface water should be tested by a certified lab.



Install the Greenery™

- DELIVERY** The Freight Farms logistics team can handle all details related to delivery, including crane and crew if necessary.
- PITCH AND LEVEL** The pitch of the Greenery™ should be 2 inches higher at the front for proper drainage. Pressure treated wood, a 2-axis laser level, and a pair of 5-ton toe jacks will be required to pitch and level the farm.
- BACKFLOW PREVENTOR** A licensed plumber should install a backflow preventer between the Greenery's external spigot and the water line if hard-plumbed. This prevents nutrient-rich water from mixing with the potable water supply.

FREIGHT FARMS BASICS

Utilities and Labor

With some water, electricity, supplies, and a little bit of hands-on work, you can get growing in the Greenery™ in no time.



Electrical

The Greenery™ requires a 120 volt split-phase connection (120/208 volt three phase is also acceptable.). If you choose to hardwire, we recommend hiring a licensed electrician for installation at the time of delivery.



Average Power Usage
125 kWh per day

Water

You will need access to water in order to fill water tanks inside the Greenery™. A designated water source is suggested, but it can be achieved with a common garden hose feed as well. The Greenery is capable of automatic tank level management.



Average Water Usage
<5 Gal per day

Nutrients and Supplies

To keep operations running smoothly and to ensure successful harvests, you will need the following items: seeds, nutrient solutions, and supplies. Everything can be purchased from farmhand® Shop.



Average Cost for Supplies
\$300 per month

Labor

The Greenery™ needs 1-2 key operators to oversee everyday production. The Greenery™ can provide meaningful part-time employment to help achieve your



Average Labor Hours
15-20 hrs per week

FREIGHT FARMS BASICS

Training & Support

The Client Services team ensures that all new and existing farmers have the tools and training needed to run their Greenery™ effectively.





Farm Camp

Farm Camp at Freight Farms headquarters provides future farmers with hands on experience inside the Greenery™ and an opportunity to meet other Freight Farmers on the same journey.

Farm Camp is also available online, taking farmers step-by-step through the entire training process using a combination of articles and videos. Checkpoints and quizzes ensure a smooth learning process.

Alternatively, the Client Services team is available for on-site training and farm launch. This will include team members travelling to your location to train you and simultaneously launch the Greenery™ for you.

Support

Our Client Services team is here to provide technical support for all Freight Farmers and is available via phone and email. Outside of regular support, we will be reaching out periodically to help you on your freight farming journey and to celebrate growing milestones.

Farmers also have access to the online Help Center, which has hundreds of articles on best practices for freight farming, food safety, operations, marketing strategy, and more. It is updated weekly and is available 24/7.

FREIGHT FARMS BASICS

Crop Possibilities

As the name suggests, the Greenery™ is optimized to grow leafy greens, lettuces, and herbs. Our customers who have also had success growing roots and flowers. These categories of plants are extensive. We've successively grown over 180 varieties and have tested over 300!





These are average yields based on single crop production.
Visit freightfarms.com/container-farm-crops to see everything you can grow.

Lettuce

WEEKLY YIELDS HARVESTING SCHEDULE

Crop Variety	3-week*	4-week*	5-week*
Bibb	1,450 heads	990 heads	700 heads
Butterhead	1,450 heads	990 heads	700 heads
Leaf	1,450 heads	990 heads	700 heads
Romaine	1,450 heads	990 heads	700 heads

Leafy Greens

WEEKLY YIELDS

Crop Variety	Pounds Per Week
Arugula	100
Asian Greens	135
Collard Greens	110
Swiss Chard	210

Herbs

WEEKLY YIELDS

Crop Variety	Pounds Per Week
Basil	90
Chives	55
Dill	90
Parsley	90
Thyme	55
Sage	75

A close-up photograph of Swiss chard leaves. The leaves are a vibrant green color with prominent, dark red veins that create a complex, branching pattern across the leaf surface. The leaves are slightly curled and layered, creating a sense of depth. The background is softly blurred, showing more of the same plants and a hint of a blue surface, possibly a table or a container.

KEEP IN MIND...

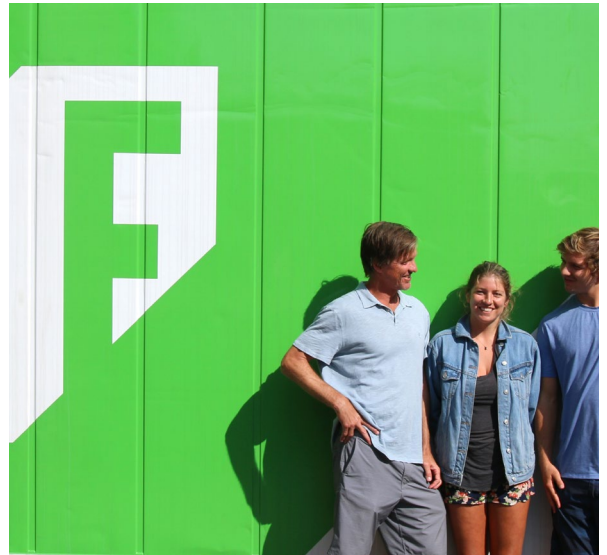
Many of our customers use our previous generation farm, the Leafy Green Machine™ (LGM). With the Greenery™, you create even greater impact, thanks to improved yields.

SOCIAL INITIATIVES

Farmers That Are Growing For Good

Several of our non-profit and for-profit customers use their Greenery™ to create community-focused programs targeting better **nutrition**, increased **employment**, effective **therapy**, well-rounded **education**, and much more.





Social initiatives that our customers have supported with the Greener™

- Employment for Adults with Special Needs
- Employment and Therapy for Veterans
- Employment and Rehab for At-Risk Adults
- Fresh Food Access
- Health and Wellness Promotion
- Hands-On Learning for Youth
- School Nutrition
- STEM Learning Opportunities
- Sustainable Agriculture
- Urban Farming Education
- Urban Revitalization

SOCIAL INITIATIVES

Providing Nutrition & Variety

Leafy greens are an invaluable component of a nutritious and well-balanced diet. The Greenery™ can grow a wide variety of leafy greens, such as kale, spinach, arugula, collard greens, Swiss chard, Asian greens, and much more.

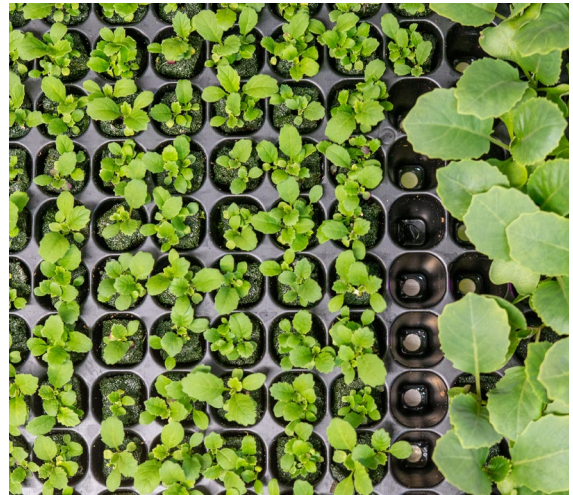




Not only are leafy greens high-fiber, low-cal, low-sodium, low-cholesterol, and low glycemic index, these leafy greens are rich sources of vitamins and minerals:

<p>Vitamin A</p> <p>Promotes good vision, a healthy immune system, and cell growth.</p>	<p>Vitamin C</p> <p>An antioxidant that helps to maintain bone, blood vessel, and skin health.</p>	<p>Vitamin E</p> <p>Balances cholesterol and fights free radicals to prevent disease.</p>
<p>Vitamin K</p> <p>Protects bones and helps prevents birth defects.</p>	<p>Iron</p> <p>Indispensable for the creation of hemoglobin and many other proteins and enzymes.</p>	<p>Folic Acid (B9)</p> <p>Helps prevent depression and is an important neonatal supplement.</p>
<p>Potassium</p> <p>An electrolyte that allows nerves and muscles to function properly.</p>	<p>Calcium</p> <p>Strengthens bones and teeth, allows for muscles to contract, supports the creation of hormones and enzymes.</p>	<p>Magnesium</p> <p>Promotes healthy bone formation, and allows for calcium absorption.</p>
<p>Thiamine (B1)</p> <p>Protects the immune system.</p>	<p>Riboflavin (B2)</p> <p>An antioxidant that fights free radicals and promotes red blood creation.</p>	<p>Carotenoids-antioxidants</p> <p>Protect cells from free radicals.</p>

Source: [USDA](#)



How Our Produce Compares

Traditional methods of sourcing leafy greens rich in crucial nutrients are not ideal. After decades of soil depletion, vegetables grown in big-Ag operations are less nutritionally dense, with nutrient declines ranging from 12% (calcium) to 37% (iron). Furthermore, once harvested, plants can lose significant amounts of their remaining nutritional value during cold storage and transport: Some vegetables can lose up to 50% of their Vitamin C during this time period.

Thanks to the Greenery's smart features, plants are grown in water with an optimal nutrient mixture, meaning that every plant can grow in an ideal environment.

Freight Farmers will typically harvest and sell produce within the same day. Their communities get the benefit of fresh produce that is not only nutritionally rich, but available all year round at a consistent quality.

Sources: *Scientific American, NY Times*

SOCIAL INITIATIVES

Creating Impact

Freight Farmers use the Greenery™ to impact a diverse number of social initiatives. From nutrition, to education, to therapy, the Greenery is a versatile tool for any farmer looking to do good.





HEALTH AND WELLNESS

EXISTING PROGRAMS

[Conquer Diabetes](#)

Leafy greens are a cornerstone of a healthy and balanced diet. The vitamins and minerals found in kale, spinach, collard greens, and other plant varieties can help prevent many chronic conditions such as: obesity, vitamin deficiencies, high cholesterol, diabetes, cancer, and high blood pressure. By pairing education with access, people at risk of developing these chronic health problems can change their eating habits more effectively.



FRESH FOOD ACCESS

EXISTING PROGRAMS

[Second Harvest Heartland](#)

One of the main uses for the Greenery™ is to bring fresh food to underserved communities and food deserts in urban or rural locations. Both nutritious and delicious, the greens from the farm are rich in nutrients and can be harvested with the seedling plug which, extends the plant's shelf life to two weeks.

“The cost of transportation to source leafy greens is prohibitive, and the short shelf life of varieties like kale and greens limits [our] programs... But this is the type of produce the individuals we serve through our programs, food shelf, and meal program partners want... Second Harvest Heartland will be the first food bank in the national Feeding America network to install a vertical farm inside of our warehouse.”

Bob Branham
Director of Produce Strategy at Second Harvest Heartland



EDUCATION

EXISTING PROGRAMS

[Urban Pastoral](#) provides a STEM education to young women in Baltimore

[Pillsbury United Communities](#) will provide an educational program for local youth in Minneapolis

The Greenery™ is an excellent educational tool for all ages. It can be used as a platform for teaching nutrition, as inspiration for STEM students, or as practical work experience for young or at-risk adults.

The Greenery™ can be used for educational purposes in the following categories:

- Agriculture and biology
- Engineering and industrial design
- Computer science
- Business and marketing
- Statistics
- Sustainability



THERAPY & REHABILITATION

EXISTING PROGRAMS

Vet Veggies Supporting veterans with PTSD

Zeponic Farms Providing work for adults with autism

Rally House Farms Providing work and rehabilitation for adults in recovery

Root Farm Combination of equine and agriculture therapy

Horticultural therapy, practiced since the Ancient Greeks, is still used today as a therapeutic method for helping at-risk and mentally-ill individuals. Farming in the Greenery™ provides many of the same benefits.

One main benefit is that farmers spend hours working with their hands. Calm and methodical work while using your hands can increase happiness by promoting feelings of vitality and effectiveness. This in turn can reduce stress and depression and relieve anxiety.



JOBS & REVENUE

EXISTING PROGRAMS

DreamTree Farms

Iowa Homeless Youth Center

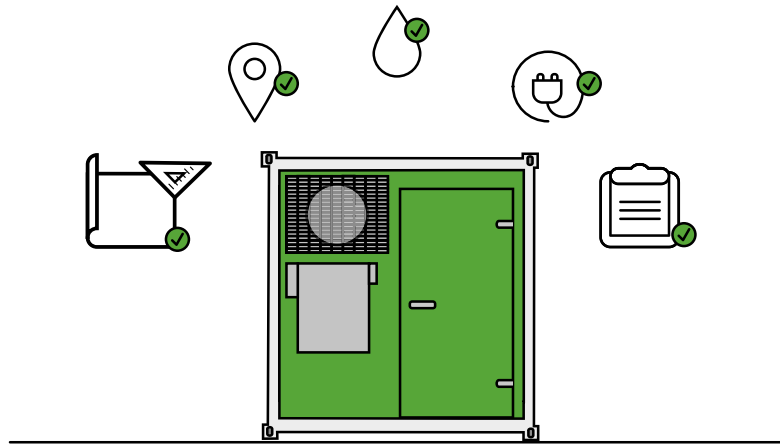
Developing a roof top garden to provide employment for at-risk youth

The Greenery™ can be operated for profit to create jobs in the community and provide a revenue stream for other parts of a non-profit organization.

“We will grow, package and distribute produce to local markets and in return create jobs and revenue for DreamTree Project.”

Catherine Hummel
DreamTree Project’s Executive Director

Sources: *Sempik 2010, Psychology Today, SFGate*



WATER CONSERVATION

A Greenery™ uses 90% less water than traditional farming.

A head of lettuce grown traditionally requires 3.5 gallons of water, while a head of lettuce grown in an Greenery™ requires only 0.1 gallons.

Because the container is designed to recycle water back into the main tank, there is little to no waste water. The occasional leakage that occurs can be collected and repurposed, or safely absorbed into the ground as there is no run-off of harmful herbicides or pesticides that can threaten surrounding water sources.

GROWING CAPACITY

A Greenery™ can produce the rough equivalent of 3 acres of traditional farm land.

The Greenery™ can produce 200 lbs of produce a week, or 4-8 tons of produce per year (crop depending).

COMMUNITY

The Greenery™ can be a great way to build community identity, involvement, and health by forging lasting interpersonal connections and a sense of purpose. Whatever your mission is, the community can volunteer, support, or benefit from the work being done in the Greenery.



Find Your Funds



There are several ways to finance your project. We've compiled information on the most popular options here.

Remember, we're here to help you through the process as best as we can, all you have to do is let us know!

FIND YOUR FUNDS

Grants

A grant is a “financial donation given to support a person, organization, project, or program” and is usually awarded to non-profit organizations with a 501(c)(3) status.





Who gives grants?

[Foundations](#)

[Corporations](#)

[Government Agencies](#)



How can grants help my project?

The most helpful aspect of a grant is that you do not have to pay money back to the grant issuer.



What do I need to apply?

First, check your eligibility with this [grant eligibility tool](#). This includes determining if your organization has the right 501(c)(3) classification. From there, determine what kind of grant you are applying for based on your project. Most grant proposals require a Request for Application (RFA) or a Request for Proposal (RFP). Unfortunately, there is no universal application and each grant will likely have a different set of requirements and questions.

Having a good understanding of your organization's project and how it relates to the grant you're applying for are the best tools you can have when applying.

Example: Government Grant

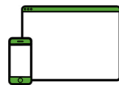
FUNDING OPPORTUNITY	Women and Minorities in STEM Fields
CATEGORY	Agriculture
EST. TOTAL PROGRAM FUNDING	\$400,000
AWARD CEILING	\$100,000
AGENCY NAME	National Institute of Food and Agriculture

Example RFA: includes a funding opportunity description, award information, eligibility information, application and submission information, application requirements, and detail on award administration... everything you need to successfully apply!



How can Freight Farms help?

While you're experts on the details of your specific project, we're experts on the details of our hardware and software! Once you've found a grant that you qualify for, send us the application and we'll make sure that we provide you with all the information you need about the Greenery™. Additionally, we are happy to share knowledge of any grants that we think can be applicable to your project.



Where can I learn more?

Visit [Grants.gov](https://www.Grants.gov) for helpful information as well as thousands of live grant opportunities.

Visit PrattLibrary.org for helpful non-profit and grant guides

FIND YOUR FUNDS

Crowdfunding

Crowdfunding is an effort to raise small donations from a large number of people. While live crowdfunding exists, we recommend looking into online crowdfunding for greater impact.

FUN FACT Freight Farms got its start with crowd funding back in 2012!





Where can I create a crowdfunding campaign?

Here are the top five crowdfunding sites for non-profit causes:

1. [Causes](#)
2. [CauseVox](#)
3. [Chuffed](#)
4. [Classy](#)
5. [Crowdrise](#)



Can you give me some campaign advice?

As a rule, the more detailed and robust your campaign is (on any platform), the better. People donating want to have all the details before they allocate their dollars to your project. Give them confidence by providing them with answers to all their potential questions.

For more advice, download a free guide from [Global Giving](#).



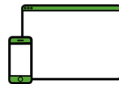
How do I get the word out?

In our digital age, sharing information is easier than ever. Most crowdfunding sites will give you the option to promote your campaign on their website. Other strategies include sending emails, posting on social media (Facebook, Instagram, Twitter & LinkedIn), local press, and word-of-mouth: All are tried-and-true ways to get contributions.



How can Freight Farms help?

We would love to help promote your project on our social media pages and with the help of our PR team. We can also provide you with any collateral you need to create your crowdfunding page, including high-resolution images, videos, statistics, and PDFs.



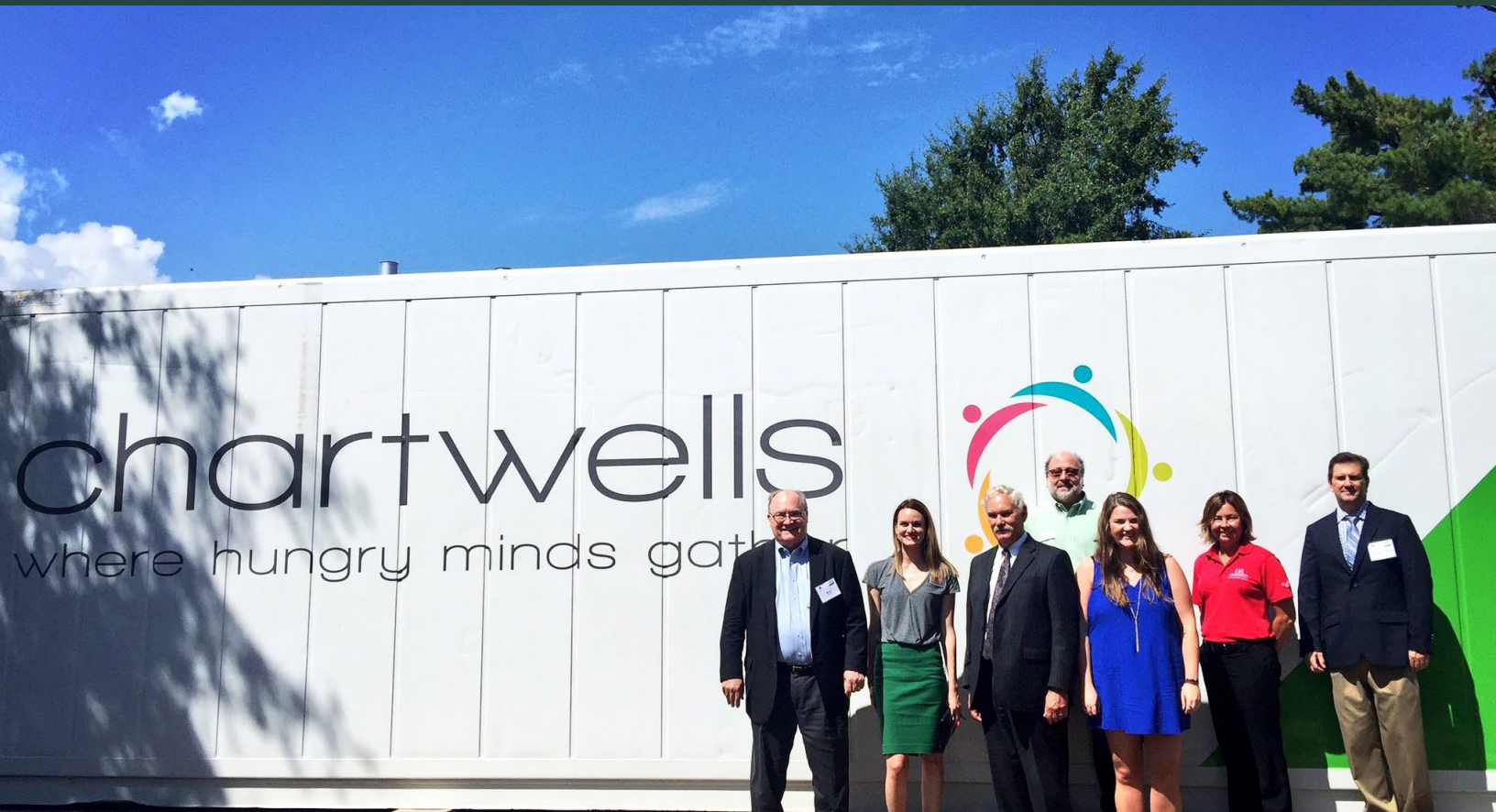
Where can I learn more?

Find more [crowdfunding websites](#) for your campaign.
Learn about fundraising regulations from the [National Council of Non-profits](#)

FIND YOUR FUNDS

Corporate Partnership

This also known as a “Corporate Sponsorship” and is different from a corporate grant. A corporate grant is a recurring opportunity with a formalized application process that can go to a variety of qualified organizations. By comparison, a corporate partnership is a relationship-based agreement where a corporation provides funds for a single non-profit organization.





How do I choose a corporate partner?

1.

Find a company whose brand and values align with your cause. This makes it much easier to create joint programming and marketing.

2.

Understand what kind of impact data they're looking for and make sure this is something you can provide. This will go a long way with corporations who have to give investors explanations for their contributions.

3.

Look for local companies. It will make communication easier and help you keep your project's identity tied to the community you're directly impacting.



How do I approach a potential partner?

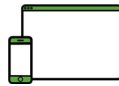
Do your research first. Figure out the company's brand values and craft a proposition based on how your cause aligns with them. Make sure to highlight the promotional value of the partnership: A lot of the times, corporations are looking for charitable partnerships to boost their brand perception.

Make sure to be organized and prepared with all of the operational and financial information for making it work. Learn all corporations' motivations for [charitable partnerships](#) and see if you're ready to approach a company



How can Freight Farms help?

We want to make sure you're as prepared as possible. We have a robust business model that will calculate your costs of operations, a huge wealth of information to answer any questions, and tons of presentation resources like presentations, flyers, and high-resolution photography. We can also connect our PR team with a corporate PR team to discuss the potential value of pitching the story to local and national media.



Where can I learn more?

Read about the [top three things](#) corporations want from a partner.

See what the [Association of Fundraising Professionals](#) have to say about building a good relationship.

FIND YOUR FUNDS

Private Donors

Raising money from private donors is all about building and maintaining relationships. Unlike crowdfunding, these individuals would be supporting the majority of your fundraising. Before approaching someone, make sure to determine a fundraising goal and have all of the details of your project ready to discuss.





How can I find donors?

Most people have their favorite “cause”, so look for donors whose interests align with your mission. This means choosing a targeted approach and creating a profile for your ideal donor, instead of reaching out to a wide audience. If you already have donors, think about their common characteristics, and the similarities you share with them (alma matter, hometown, religious or ethnic background, etc.). All of these things can help you identify new donors. If you don’t have any donors, get inspiration from projects that address a cause similar to yours.

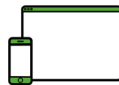
Once you’ve identified your donors, treat them like leads in a sale cycle.

You have to contact them, qualify how interested they are, get to know them, introduce your project with supporting information, and make the donation request.



How can Freight Farms help?

Not only can we provide you with all of the information you would need to persuade a new donor to contribute to your cause, but our team can be a great resource as well. We’re happy to join virtual meetings with you and potential donors to add credibility to your project.



Where can I learn more?

Read more about recruiting major donors from [KnowHowNonProfit.org](https://www.knowhownonprofit.org)



LETTUCE CONNECT

877.687.4326

Hello@freightfarms.com

Visit freightfarms.com/faq for more information