



INVEST IN AZOLLA, INC.

 **Turning emissions into carbon negative textiles.**

[azolla.tech](https://azolla.tech) Oakland, CA

Technology

Female Founder

B2C

Manufacturing

Sustainability

## Highlights

- 1** We are solving one of the world's biggest problems by turning harmful CO2 into usable products
- 2** Creating carbon-negative sustainable alternatives for the trillion dollar textile market

- 3 Enabling fashion brands to meet their net-zero goals without sacrificing profitability
- 4 Each pound of our biodegradable material removes 3 pounds of CO2 from the air
- 5 Potential revenue streams from multiple sources
- 6 CEO with 20+ years in textile industry gives us an inside track to manufacturing pipeline
- 7 Founders with industry experience backed by accomplished advisors and scientists from National Labs
- 8 Drop-in platform technology can be integrated into existing infrastructure to make consumer products

## Our Team



**Lubica Hanacek** CEO

Ring Leader. 20+ years of experience in the textile industry including leading positions in strategic business development, supply chain management and product design at Levi's, Target, and Bed Bath & Beyond.

I love textiles! Working in the industry for over 20 years, I have seen first hand the devastating effects it has on the environment. My yearning to repair some of that damage lead me to co-found Azolla and create a textile option that removes carbon from the air instead of releasing it.



**Milan Hanacek** CTO

Bioarchitect. 20+ years of experience scaling ideas in megaprojects. Development

leader of \$1.4B project at AECOM, key developer of engineering and industrial production facilities on two continents at Bechtel.



**Dan Robertson, PhD** Chief Scientific Advisor

Science pro. 30+ years of experience in biotech, from start-up to commercialization. Former CSO and Chairman of Executive Technical Committee at Joule; VP of Biofuels R&D at Diversa. PhD in Biochemistry. 24 patents and 70 publications.

---

## Pitch



***Azolla's vision is to give people reason to feel good about buying their clothes.***

We want to give consumers power to have positive impact on the environment.

We want to give them the opportunity to choose clothes made from carbon negative textiles.

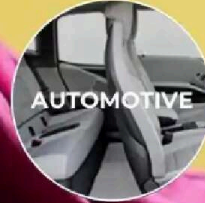
We want people to be able to say that the jeans they are wearing removed 10 ponds of CO<sub>2</sub> from the air.



# Textiles are everywhere



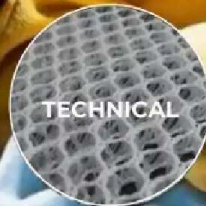
HOME



AUTOMOTIVE



APPAREL



TECHNICAL

**\$ 3+**  
**trillion**

*The global apparel market alone is expected to reach \$3 trillion by 2025.*

Textiles are an important part of our everyday lives, and the projected growth in demand for textile products is directly linked to population growth.

## ... and they are killing our planet

**3.29**  
**gigatons**  
CO<sub>2</sub> emissions

**150**  
**million**  
trees

**21**  
**trillion**  
gallons of water

Textiles are projected to account for 26% of global emissions by 2050 with a burden of more than three gigatons.

**Environmental cost of textile production:**

98 million tons of non-renewable resources, 342 million barrels of oil, 200,000 tons of pesticides, and 8 million tons of fertilizers are used annually for textile fiber production

## Consumers are demanding better options



**Key Market Drivers**

The negative impacts of the industry are becoming ever more transparent and understood by digitally enabled customers, leading to reputational risks for brands.

A public appeal from individuals and governments for the industry's transition to better manufacturing practices is creating a significant demand for sustainable alternatives.

## Demand for sustainable textiles is exploding


**Brands are setting sustainability goals**





H&M

## ΔZOLLA is climate positive



We help companies to meet their net-zero goals without sacrificing profitability

Our vision is to give people reason to feel good about buying their clothes

We are bringing a climate positive alternative to the world's biggest brands and manufacturers to give them a powerful tool to meet their climate goals.

If successfully deployed and implemented on a large scale, Azolla's technology could play a crucial role in addressing climate challenges. Our unique carbon-negative approach to textile production will result in significant carbon dioxide reduction.



## ΔZOLLA mimics nature's blueprint

Our unique Industrial Photosynthesis converts CO<sub>2</sub>, water & light into **carbon negative** biomaterial

SUNLIGHT

CO<sub>2</sub>

WATER

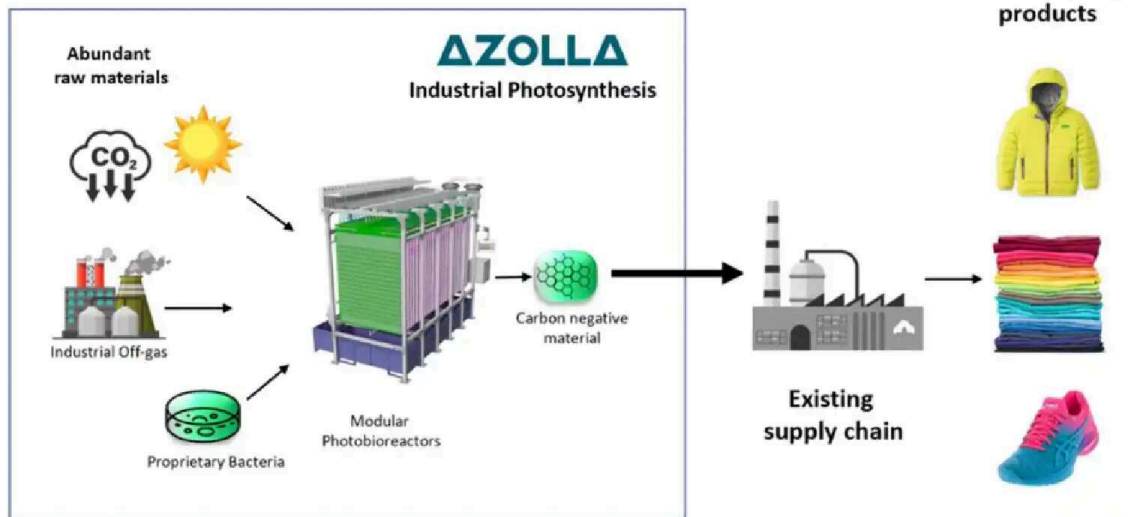
***Our technology is inspired by Nature***, in the same way a tree turns carbon, water and light into the most abundant polymer on earth called cellulose, our process converts waste carbon, into natural biodegradable material.

It takes trees a long time to grow and the process to turn them into fibers is very inefficient and toxic.

We know, that in order to achieve commercial success, our technology must be much more efficient, and to achieve this, Azolla is re-writing biology to create advanced version of photosynthesis.



## Our process



**Every pound** of our material removes **3 pounds** of CO<sub>2</sub>

Our process is very simple: our unique, genetically engineered bacteria, we think of them as tiny biofactories, are living happily in a perfect environment in our bioreactor (like a 5-star all-inclusive resort), eating tons of CO<sub>2</sub> and as a payment, they are producing pure carbon negative material that can be used to make textiles.

Because we can eliminate all the steps to grow, harvest, and process raw materials, our method is very efficient, inexpensive and easily scalable.

# Better in Every Way

[illegible]



Azolla will provide the fashion industry with textile fiber that has the performance properties of synthetics, like durability, strength and flexibility, and the comfort of natural fibers like cotton.

Because our fiber is natural like cotton, it is also biodegradable, and won't contribute to microfiber pollution.

## Fast-to market strategy



Our material is applicable to many industries, and we have developed strategic plan to ensure successful scale up and commercialization over the next few years.

Our long-term goal is to address the urgent need for sustainable solutions in multiple markets by licensing our technology to manufactures in various industries that are urgently looking for sustainable materials and ready to collaborate on product development and integration of our technology into their existing supply chains.

## Partners

We are supported by prestigious organizations focused on advancing decarbonization of consumer industries that underpin the global economy





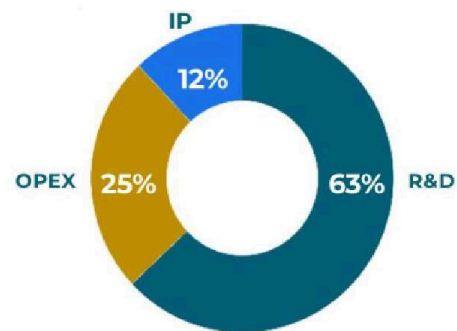
Recognizing the urgent need for rapid market integration, we are eager to accelerate our technology deployment by partnering with National Labs and academic institutions.

We plan to leverage their considerable expertise and state-of-the-art facilities to encourage continuous innovation and improvement, boost production and drive down costs so we can deliver our carbon transformation technology to market on expedited timeline.

## Your Investment

will help us complete proof of concept:

- Produce consistent amounts of biomaterial
- Make product samples
- Develop strategic partnership with Fashion Brand
- IP protection



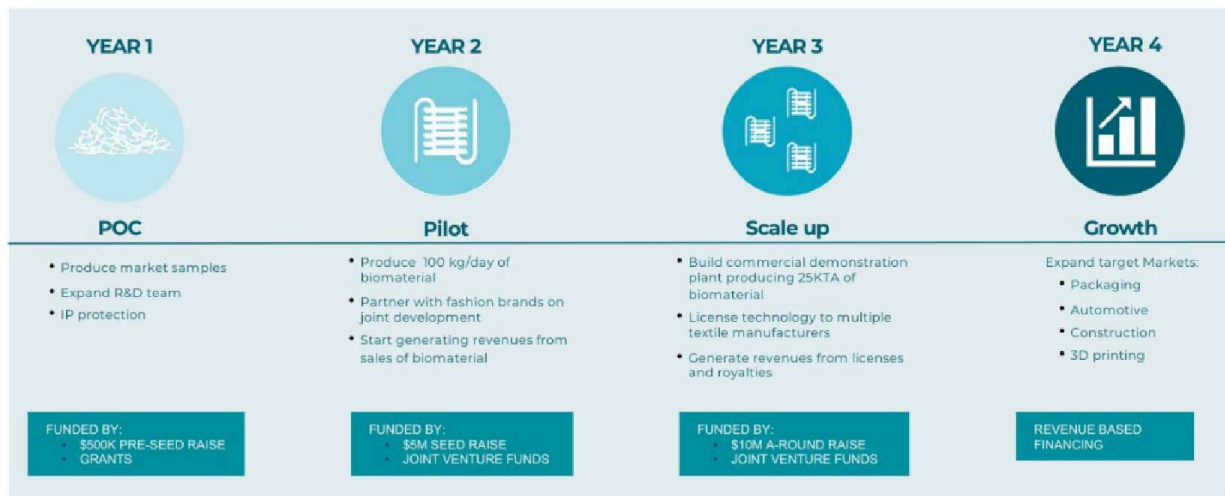
We will use the funds to expand our scientific team, cover lab expenses and file for several patents

Azolla has been awarded \$850K funding from DOE of to collaborate with Agile Biofoundry to advance the technology to successful completion of proof of concept. This collaboration with the national laboratories will allow us to leverage the brightest scientific minds as well as the use their state-of-the-art facilities and cutting-edge research in synthetic biology, artificial intelligence and machine learning.

## What does Future Look Like?



Azolla is leveraging existing infrastructure and a licensing model to drive rapid growth.



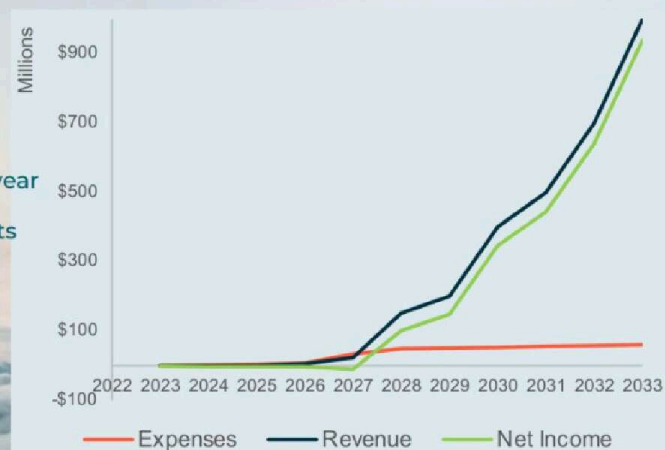
Our objective is to advance the technology to be commercial ready in 2 years to meet the huge demands for sustainable materials.

Looking ahead, we are poised for rapid growth. We are in discussion to form strategic partnerships with several fashion brands and manufacturers to co-develop products for their specific markets.

Forward-looking statements are not guaranteed.

## Robust revenue opportunities

- Low capital licensing business model
- Market opportunity for multiple licenses per year
- Additional revenue stream from carbon credits



To bring Azolla's technology to market fast, our business model is based on licensing the technology to textile manufacturers that are already looking for sustainable options.

and are already seeing the economic impact.

Our revenue projections are robust. Based on our current assumptions and high demand for sustainable materials, we expect to start generating revenue in 24 months.

Forward-looking projections are not guaranteed.

## Team

Founding team with deep experience across consumer industries.



Levi's target POTTERY BARN  
Lubica Hanacek  
CEO



BECHTEL AECOM  
Milan Hanacek  
CTO

As a fashion designer and an architect we know that our industries are major contributors to environmental degradation. Working for large corporations, we were desperately searching for clean and sustainable materials, however all we could find were products using toxic manufacturing. We saw this not only as an immense opportunity, but also as an obligation.

**We founded Azolla to develop sustainable solution for our industries.**

As skilled professionals with years of experience in product development and project management we are well equipped to ensure successful realization of our vision.

We are two daring adventurers, taking on challenges for a long time and we know that as a team we are invincible. To pursue our dreams, we risked our lives - literally crawling across the border to freedom - with nothing but the clothes on our backs. We came to the US as young political refugees, putting ourselves through college, eventually achieving considerable success in our respective careers.

Encouraged by our track record, we are stepping up our game to leave a legacy of better world.

## Team

Founding team is supported by accomplished advisors and scientists from national labs



Dan Robertson, PhD  
Chief Scientific Advisor





## ADVISORS

Our advisory team includes PhDs in biochemistry, chemistry, genetic engineering and molecular biology along with decades of expertise in engineering and operations, product development and supply chain management with leading organizations, including:

ExxonMobil



SIEMENS

BIOFABRICATE

PLUGANDPLAY

WILMERHALE

We are supported by a team of accomplished advisors from scientific community, biomanufacturing and business development areas that share our vision and believe that our technology has the potential to deliver economically viable sustainable material option.

# The Opportunity

## Why invest in **ΔZOLLA**?

Actively participate in restoring the environment

Have a stake in company making carbon-negative products

Capture benefits of global decarbonization

Your investment in **ΔZOLLA** is just the beginning of an exciting future where many consumer products are made from carbon emissions.

We are energized by giving everyone the opportunity to contribute to climate solutions, and we are looking for investors that share our vision for building a climate positive future.

You can help us create future where the unthinkable is possible



**If you can not invest today, you will do just as much good for the world by SHARING this page with someone who wants to ensure sustainable and abundant future.**