



# Beyond Silicon

**NEXT-GENERATION OF  
SOLAR SOLUTIONS FOR A  
SUSTAINABLE WORLD**



**Same Solar Module**

**30% more power**

compared to existing silicon technology



## **WE ARE AN ENERGY COMPANY SPECIALIZING IN THE NEXT-GENERATION OF SOLAR TECHNOLOGY**

Beyond Silicon leads solar innovation by developing bifacial perovskite/silicon tandem cells, delivering 30% more power compared to conventional silicon solar cells. Our technology offers a seamless drop-in replacement for existing solar modules, enabling manufacturers to upgrade their systems with minimal disruption while creating a more sustainable energy future.

## **WHY CHOOSE BEYOND SILICON**

### **Tandem Solar Cells for Tomorrow's Modules**

- **30% More Efficiency:** Our tandem cells capture 30% more power compared to traditional silicon PV cells, giving you more energy with the same surface area.
- **Easy adoption:** Our customers (module manufacturers) do not need to change their process to use our tandem solar cells.
- **Dual-Sided Light Capture:** With bifacial cells, light is absorbed from both sides, maximizing energy output even in diffuse lighting conditions.
- **Cost Effective:** We're committed to making solar manufacturing more cost-efficient, helping you meet your sustainability goals in an efficient way.

## **WHO WE AIM TO SERVE**

- Photovoltaic (PV) Module Manufacturers

# ENERGY SUSTAINABILITY GOALS BECOME MORE ACHIEVABLE

Beyond Silicon's product—bifacial perovskite/silicon tandem cells—is contributing to improving solar efficiency and making renewable energy more cost-effective and accessible.

## OUR EXPERT TEAM



**CEO**  
Jason Yu, PhD



**Business Development**  
Zachary Holman, PhD



**Development Engineer**  
Mathilde Fievez, PhD



**Perovskite Engineer**  
Wahab Alasfour, PhD

Beyond Silicon's leadership is made up of skilled professionals and engineers with expertise in electrical engineering, material science, and mechanical engineering. Their combined knowledge drives innovative solutions, ensuring excellence in our renewable energy technology.



## THE SCIENCE BEHIND TANDEM SOLAR CELLS

Our bifacial perovskite/silicon tandem cells represent the next generation of solar power technology. Here's how they work:

### LAYERED STRUCTURE

By combining perovskite and silicon layers, these cells capture a broader spectrum of sunlight, ensuring maximum efficiency from UV to near-infrared light

### BIFACIAL TECHNOLOGY

Our tandem cells capture sunlight from both sides, boosting energy production, even when reflected light or diffuse lighting conditions are present

### DURABILITY & LONGEVITY

Developed in collaboration with top research institutions, our cells are built to withstand the elements and offer long-lasting performance, reducing the need for frequent replacements

## PIONEERING RESEARCH & STRONG PARTNERSHIPS



## AWARDS



## CONTACT US

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