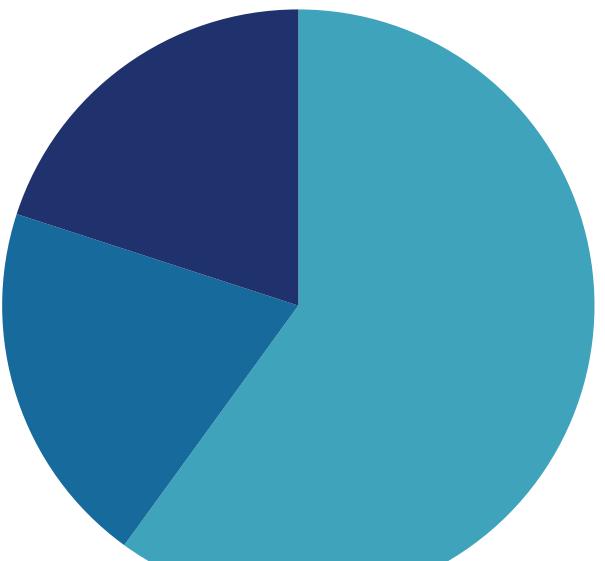


# Introduction

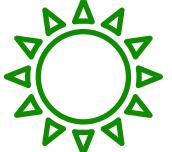
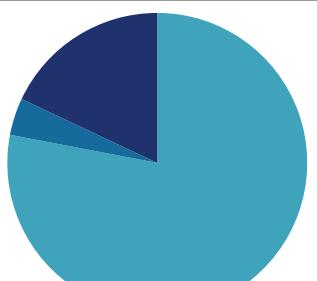
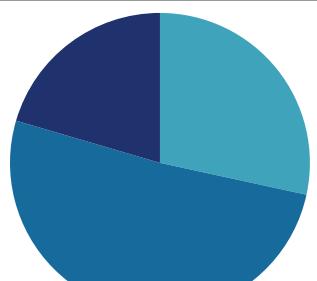
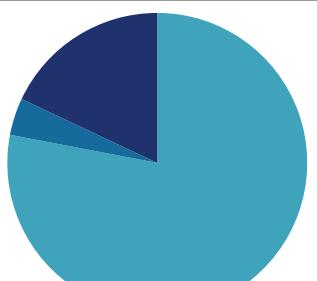
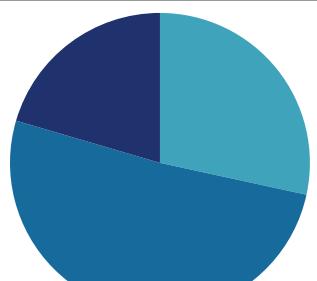
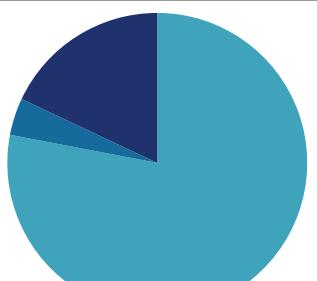
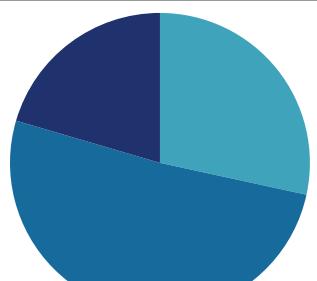
Barefoot College		Our Team								
<p>Barefoot College International (BCI) forges a first-of-its-kind, women-centered, global network dedicated to sustainable development for marginalized rural communities in over 93 countries. They are working to increase economic equity by making vocational and educational opportunities accessible to women and girls from the most marginalized communities around the world. BCI seeks to ensure that every woman and girl has the skills and knowledge she needs to be a catalyst for change to the benefit of herself, her family and her entire community.</p>		 Kaustubh Mhaisekar								
Executive Summary	Projected Impact	Grant Utilisation								
<p>Communities suffer from unreliable power, low digital literacy, and energy poverty, which limit access to education, healthcare, and economic opportunities. These challenges create a pressing need for sustainable, community-driven solutions to break this cycle.</p> <p>Our proposal addresses these issues by expanding reliable energy access, empowering local capacity, advancing healthcare delivery, and promoting digital inclusion and education. Together, these initiatives will lay the groundwork for resilient and economically active communities.</p>		 <p>A pie chart illustrating the distribution of grants. The chart is divided into three segments: a large teal segment (Solar), a medium blue segment (Enrich), and a smaller dark blue segment (Livelihood).</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Solar (150000)</td> <td>Large Teal Segment</td> </tr> <tr> <td>Enrich (50000)</td> <td>Medium Blue Segment</td> </tr> <tr> <td>Livelihood (50000)</td> <td>Dark Blue Segment</td> </tr> </tbody> </table>	Category	Value	Solar (150000)	Large Teal Segment	Enrich (50000)	Medium Blue Segment	Livelihood (50000)	Dark Blue Segment
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Solar Mamas  
Around The World

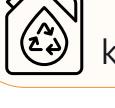

Case  
studies  
different  
locations



# Background

Mission Statement	Global Impact					
<p>To make vocational and educational opportunities accessible to women and girls from the most marginalized communities around the world. They believe providing these opportunities to women is the solution to ensuring long term climate, economic and social resilience for rural communities globally.</p>	<p>BCI operates in over 2000 villages in 93 countries worldwide. They work primarily with communities with little or no infrastructure, majority of them today being in the African Continent.</p> 					
History	Demographics					
 Barefoot College was founded in Rajasthan, initially addressing drinking water shortages in drought-prone areas <b>1972</b>	 The Solar Mamas program expanded internationally, with over 1,700 women trained as solar engineers across 93 countries <b>2015</b>	 Barefoot College celebrates 50 years, and *insert impact* <b>2022</b>				
 Barefoot College held its first workshop on solar power, and the Solar Mamas initiative was launched. <b>1996</b>	 Kamala Devi becomes the first Solar Engineer trained by the Barefoot College <b>1997</b>	 <b>TODO</b> <b>2023</b>				
Problem	Current Programs	2024 Annual Budget				
<p>There are about <b>930 million</b> rural people in the world without access to electricity. People in such households, especially women face a major hindrance in economic opportunities, job creation, education, and healthcare.</p> <ul style="list-style-type: none"> <li>Over a <b>third</b> of the <b>global population</b> is still dependent on <b>wood based fuels</b> for their primary household energy consumption- making them prone to <b>respiratory problems, ocular diseases, risk of fires</b> and <b>accidental burnings</b>.</li> <li>These households spend up to <b>30%</b> of their income on resources like <b>kerosene, firewood, charcoal</b> etc.</li> <li>Without <b>access to radios or the internet</b>, communities may remain cut off from government schemes, support networks etc can also lead to social exclusion and further marginalization.</li> <li>Less than <b>10%</b> of the women in such households have livelihood skills they can derive income from, as they have to spend a significant portion of their day on <b>unpaid domestic work</b> like <b>collecting firewood, pumping water</b> etc.</li> <li>Girls are often kept home to help with these <b>chores</b>, perpetuating the cycle of <b>limited education and opportunity</b></li> </ul>	<p>Barefoot college works with grassroots communities to <b>improve livelihoods, protect planetary and human health, and to foster overall growth and transformation</b> of these communities. The current programs address <b>15 of the 17 United Nations Sustainable Development Goals</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <b>Solar</b>            Training rural women to become Solar Engineers aka <b>Solar Mamas</b> </div> <div style="text-align: center;">   <b>Enrich</b>            Empower women with life skills, confidence, and knowledge to become agents of sustainable change         </div> <div style="text-align: center;">   <b>Livelihoods</b>            Develop local craft &amp; vocational skills enabling individuals to generate income &amp; become self reliant         </div> </div>	<p> <b>2024 Annual Budget</b></p> <table border="1"> <thead> <tr> <th>Funding</th> <th>Expenses</th> </tr> </thead> <tbody> <tr> <td>  <ul style="list-style-type: none"> <li>Corporations and Foundations (78)</li> <li>Online (4)</li> <li>Self Funding (18)</li> </ul> </td> <td>  <ul style="list-style-type: none"> <li>Corporations and Foundations (25)</li> <li>Online (45)</li> <li>Self Funding (18)</li> </ul> </td> </tr> </tbody> </table>	Funding	Expenses	 <ul style="list-style-type: none"> <li>Corporations and Foundations (78)</li> <li>Online (4)</li> <li>Self Funding (18)</li> </ul>	 <ul style="list-style-type: none"> <li>Corporations and Foundations (25)</li> <li>Online (45)</li> <li>Self Funding (18)</li> </ul>
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Size of Organization	Full time staff <b>84</b>	Volunteers <b>6</b>				

# Impact and Effectiveness

Current Impact							
 <b>3500+</b> Solar Mamas	 <b>90%</b> Reduction in Fossil Fuel usage	 <b>30%</b> Increase in educational attainment	 <b>78%</b> Improvement in Carbon Offset	 <b>70%</b> Reduction in ocular respiratory diseases	 <b>50%</b> Increase in household income	 <b>35%</b> Reduction in energy costs	 <b>2425969+</b> Total Beneficiaries
Business Model				Partnerships			
<p>Barefoot College operates as a not-for-profit social enterprise that empowers rural communities—especially women—through hands-on training in solar engineering, artisan crafts, and community leadership. Its business model combines philanthropic funding with earned income from the sale of artisan products and solar services, reinvesting proceeds to sustain and expand community-led initiatives. This approach prioritizes self-reliance, low overhead, and reinvestment into local development.</p> 							
 Solar electrified 175,000 households	 3000+ tons of carbon emissions avoided in the last 3 years	 More than a 100 million liters of kerosene saved due to shift to solar	 todo financial number	todo charts here	<h3>Measuring the impact</h3> <ul style="list-style-type: none"> <li>Performance measurement focuses on three core areas: Environment, Women, and Economic Empowerment. Additional domains include domestic, health, productive, education, and public impact.</li> <li>Global Indicators are used to specifically track progress toward SDGs such as No Poverty (1), Gender Equality (5), Affordable and Clean Energy (7) etc.</li> <li>Routine monitoring is conducted, with data collected and analyzed six months after solar equipment is installed by Solar Mamas in their communities.</li> <li>Evaluation schedule:           <ul style="list-style-type: none"> <li>Baseline assessment during Solar Mama training</li> <li>Mid-term evaluation two years after installation</li> <li>Final evaluation four to five years after installation</li> </ul> </li> </ul>		

# Project Proposal

## ⚠ Current Limitations and Challenges

### Limited Power Output

Existing solar infrastructure in the communities provide only basic energy and lighting, restricting the ability to power larger devices or support community infrastructure.

### Digital Divide

Many Solar Mamas and their communities lack reliable internet access and digital devices, limiting opportunities for online education, medicine, and digital financial services.

### Digital Literacy

While some digital tools have been introduced, many Solar Mamas have only minimal training in using laptops, tablets, or internet resources, restricting their ability to leverage technology for broader community benefit.

### Energy Poverty

The absence of dependable electricity directly limits access to quality education and healthcare. Students can't study after dark, clinics can't refrigerate vaccines etc—perpetuating poverty and slowing community progress.



## Our Proposal

An uplift of the current Solar Mamas project to create more resilient and economically active communities. This proposal aims to empower existing under-served communities by providing access to reliable, self-sufficient solar energy. By combining household systems with larger community-based solar solutions, the initiative seeks to create a foundation for economic growth, improved healthcare, and digital inclusion.

### Community Level Energy

- BCI will install centralized 20kW solar micro-rids using 400W mono-crystalline panels, lithium battery storage, and hybrid inverters.
- The system will be supported by distribution infrastructure including poles, meters, and cabling to power key community facilities.
- Solar Mamas will be trained to handle installation and basic maintenance.

### Household Level Energy

- Each household will be equipped with an 80W solar home lighting system that includes a solar panel, a 24Ah battery, and 4 LED lamps.
- In addition, solar lanterns will be distributed to ensure portable lighting options.
- Solar mamas will assist in deployment, user orientation, and minor troubleshooting within the village cluster.

### Healthcare

- A solar-powered healthcare package will be established, including refrigerators for vaccine and medicine storage, fans, lighting, and a water pump to supply clean water.
- BCI will train auxiliary healthcare workers from the community and develop locally relevant content to support primary care delivery.
- A solar backup system will ensure uninterrupted operation of basic health services.

### Education

- BCI will deploy a digital education kit composed of laptops, projectors, lighting, and fans powered by the solar infrastructure.
- Community-level instructors will be trained to use these tools for blended learning environments.
- Tailored educational content will be developed and delivered using this setup.

# Project Proposal

 Goals	 How is this proposal innovative?										
<ul style="list-style-type: none"> <li>The overall goal is to give beneficiaries the self-sufficient energy means to achieve a GDP per capita level of \$1000 per year.</li> <li>Deliver baseline electricity of 1000kWh per person per year through a mix of 20 kW village micro-grids and 80 W solar home systems.</li> <li>Achieve universal household electrification within the target community in &lt; 24 months, eliminating kerosene and diesel for lighting and phone charging.</li> <li>Equip and solar-power core social services—one primary clinic and one school—with 24/7 electricity for refrigeration, digital learning, lighting, ventilation, and water pumping.</li> <li>Build resilient local capacity by training at least seven community members (with gender parity emphasis) as Solar Mamas / technicians and two auxiliary healthcare workers.</li> </ul>	<ul style="list-style-type: none"> <li> <b>Energy as a Foundation for GDP Growth:</b> This proposal is strategically aligned with the 1,000 kWh per person per year threshold—directly targeting the energy-GDP link to unlock sustained economic development, not just basic access.</li> <li> <b>Integrated Infrastructure Approach:</b> Instead of isolating sectors (energy, health, education), this program coordinates energy deployment in a unified plan—ensuring simultaneous upliftment in health, education, and livelihoods from a shared power backbone.</li> <li> <b>Local Ownership and Gender-Led Implementation:</b> By training women as “Solar Mamas”, the program shifts technical roles to local women. This community-led model is designed to reduce dependence on external technicians or agencies.</li> <li> <b>Scalability Through Modularity and Cost-Tracking:</b> The model is modular—combining 80W solar-home systems and scalable micro-grids (20kW–1000W)—which allows it to be adapted to villages of varying sizes and making it replicable in other regions with minimal adaptation.</li> </ul>										
 Scalability	 Projected Impact										
<p>This project is designed with a modular and community-driven approach, making it easily replicable across different regions. By standardizing core components—such as household solar kits and microgrid installations—the model can be adapted to suit various community sizes and energy needs. Once piloted successfully, local solar mamas can be trained to install and maintain systems, creating a network of grassroots energy champions. Partnerships with local governments and NGOs can further support replication, allowing the model to expand organically without heavy reliance on centralized infrastructure.</p>	<table border="1"> <thead> <tr> <th data-bbox="1512 1220 2174 1263">Immediate Community Level Impact</th> <th data-bbox="2203 1220 2836 1263">Long Term Global Impact</th> </tr> </thead> <tbody> <tr> <td data-bbox="1512 1263 2174 1522"> <b>24/7</b>            Powered community facilities         </td><td data-bbox="2203 1263 2836 1522"> <b>90%</b>            Reduction in diesel dependence         </td></tr> <tr> <td data-bbox="1512 1522 2174 1609"> <b>500+</b>            People get clean water supply         </td><td data-bbox="2203 1522 2836 1609"> <b>40%</b>            Cuts in waterborne illnesses         </td></tr> <tr> <td data-bbox="1512 1609 2174 1652"> <b>5000+</b>            Annual patient consultations         </td><td data-bbox="2203 1609 2836 1652"> <b>25%</b>            Increase in secondary school graduation rates         </td></tr> <tr> <td data-bbox="1512 1652 2174 1695"> <b>100+</b>            Students gain digital education         </td><td data-bbox="2203 1652 2836 1695"> <b>\$15</b>            Per month cost reduced per household on kerosene         </td></tr> </tbody> </table>	Immediate Community Level Impact	Long Term Global Impact	<b>24/7</b> Powered community facilities	<b>90%</b> Reduction in diesel dependence	<b>500+</b> People get clean water supply	<b>40%</b> Cuts in waterborne illnesses	<b>5000+</b> Annual patient consultations	<b>25%</b> Increase in secondary school graduation rates	<b>100+</b> Students gain digital education	<b>\$15</b> Per month cost reduced per household on kerosene
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 How else can Goldman Sachs help?	 Evaluation										
<ul style="list-style-type: none"> <li><b>Strategic Partnerships for Scaling Impact:</b> BCI can leverage Goldman Sachs' experience in initiatives like <b>One Million Black Women</b> or <b>10,000 Women</b> to drive economic growth and opportunity.</li> <li><b>Skills-Based Volunteering and Mentorship:</b> Goldman Sachs employees can provide pro bono expertise in areas such as financial literacy, digital skills, entrepreneurship, and business management, serving as mentors and coaches for women entrepreneurs.</li> <li><b>Marketing and Communications:</b> Volunteers with expertise in marketing and communications can help enhance its storytelling, develop impactful campaigns, and expand its digital presence through collaborations with some of Goldman Sachs' publications like <b>Womenomics</b>.</li> </ul>	<p>The project will be evaluated through a framework using both quantitative and qualitative tools:</p> <ul style="list-style-type: none"> <li><b>KPIs</b> will track outcomes across energy access, healthcare, education, and local capacity building—such as the number of households electrified, patients treated, students using digital tools, and women trained as Solar Mamas.</li> <li><b>Baseline surveys</b> with beneficiary households will assess improvements in energy reliability, cost savings, and service access.</li> <li><b>Technical logs and sensor data</b> will monitor equipment uptime, while <b>school and clinic records</b> will provide service usage data.</li> <li><b>Focus group discussions</b> with members will capture user satisfaction and qualitative insights.</li> <li><b>Monthly field visits</b> and <b>technician reports</b> will verify functionality and address any service gaps.</li> <li><b>Feedback loops</b> with the community will ensure the program remains adaptive and accountable.</li> </ul>										

# Conclusion

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**"Empowering women is no longer an option, it is an economic and business imperative. At Goldman Sachs, we believe that when women do better, we all do better"**

- WOMENOMICS: COVID-19'S IMPACT (June 2021)

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Women most undervalued asset section

Individual case studies