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# POWER FOR ALL FACT SHEET:

## Decentralized Renewables: Empowering Women As Sustainable Energy Leaders

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# POWER FOR ALL

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### By the Numbers:

# 59%

INCREASED WAGES FOR  
RURAL WOMEN WITH ENERGY  
ACCESS IN BRAZIL

# 72%

DECREASE IN PERINATAL DEATHS  
WHEN USING SOLAR SUITCASES  
IN HOSPITALS IN UGANDA

# 83%

WOMEN WITH SOLAR LANTERNS  
WHO FEEL INCREASED CONTROL  
OVER FINANCIAL DECISIONS IN  
TANZANIA

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Energy poverty is not gender-neutral: evidence shows that women disproportionately bear the burden of energy poverty. Distributed renewable energy solutions can not only empower women economically and socially as end users, but the sector itself can significantly benefit by proactively integrating women across the value chain as designers, educators, trainers, managers, and entrepreneurs.

### Women disproportionately bear the burden of electricity poverty:

- » The lower a country's electricity access rate, the higher its gender inequality index.<sup>1</sup>
- » 85% of the 2 million deaths caused annually by indoor air pollution from burning fuels are deaths of women and children.<sup>2</sup>
- » Over 300,000 women die annually from complications with pregnancy and childbirth.<sup>3</sup> Unreliable electricity in health facilities adversely affects the provision and access to essential life-saving maternal and newborn care services.<sup>4</sup>
- » After disasters and conflicts, women and children in internally displaced person camps that are unlit at night face increased risks of assault and sexual and gender-based violence (SGBV).<sup>5</sup>

### Distributed renewable energy solutions have the potential to save lives and empower women through enterprise, while encouraging technology uptake more broadly:

- » **“Solar Mamas,”** illiterate mothers who have been trained as solar engineers by India's Barefoot College, have installed over 45,000 solar home systems in 1,083 villages in 63 countries.<sup>6</sup> In working outside the home, these women become economically empowered, earning as much as \$60 per month.<sup>7</sup>
- » The **Grameen Shakti** project in Bangladesh has trained over 30,000 women to install and maintain over 1 million solar home systems.<sup>8</sup>
- » **Solar Sister's** over 2,400 women entrepreneurs have brought solar lighting, mobile connectivity, and clean cooking solutions to over 800,000 people in Nigeria, Tanzania, and Uganda.<sup>9</sup>
- » **We Care Solar's** 2,000 solar suitcases in over 30 countries are helping midwives and doctors perform obstetric procedures throughout the night.<sup>10</sup> In Uganda, use of solar suitcases in health centers resulted in a 72% decrease in perinatal deaths.<sup>11</sup>

### Furthermore, evidence shows that distributed renewable energy solutions must involve women across the value chain to have impact:

- » In Brazil, energy access is strongly correlated with higher incomes for women: rural self-employed women with energy access have over twice the income of women without energy access.<sup>12</sup>

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- » In South Africa, women's employment rate in electrified villages increased by 13.5 % points, while men's employment increased by 4 % points.<sup>13</sup>
- » In Tanzania, women with solar lanterns had more decision-making power and respect in their households and communities. 83% of women with solar lanterns reported increased control over financial decisions, 70% felt more respected in their household, and 64% felt more respected in their community.<sup>14</sup>
- » In Lao PDR's rural electrification program, female-headed households were found to have disproportionately low rates of grid connection. To address this problem, the program adopted gender-inclusive consultation and participation, as well as female-friendly lending techniques, resulting in connection uptake rates of up to 98% for the program.<sup>15</sup>
- » Traditionally, development finance institutions (DFIs) have focused on large-scale, capital-intensive technology projects to expand energy access, while overlooking household energy uses such as food processing and procurement of water and fuel. Since women do a disproportionate share of household work, this unwittingly perpetuates gender inequalities.<sup>16</sup>

#### **Energy access policy must do more to directly focus on gender:<sup>17</sup>**

- » Gender-sensitive approaches to electrification are mainly initiated by international development agencies or NGOs, while current national-level electricity access policies are gender blind.
- » A stronger alignment between energy access policy and gender equality policy can identify how electricity access can be more effective in combating gender inequality.
- » Energy access statistics must be disaggregated by gender: the current unit of analysis for energy access is the household, which masks differences between energy use by women and men.
- » Electrification ministries must collaborate with other ministries in fields such as agriculture, forestry, and rural development to achieve a more integrated approach to energy access.

#### **Join Power for All and Solar Sister to share the following messages:**

- » Energy poverty is not gender-neutral: women disproportionately bear the burden of energy poverty.
- » Women hold tremendous untapped potential to expand the adoption of distributed energy solutions around the world as changemakers, entrepreneurs, trainers, and managers.
- » More concerted policy action is needed to ensure that electricity access helps reduce gender inequality.

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**Special thanks to our partner Solar Sister in the development of this Fact Sheet**

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