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# POWER FOR ALL FACT SHEET

## Decentralized Renewables: Lifting People Out Of Poverty

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## \$40 billion

IN ANNUAL ENERGY SAVINGS IF ALL HOUSEHOLDS USING KEROSENE AND CANDLES FOR LIGHTING SWITCHED TO SOLAR LIGHTS

## 1.6 million

PEOPLE'S LIVELIHOODS AUGMENTED BY THE PICO-SOLAR SECTOR

## 6 million

FULL TIME JOB EQUIVALENT IN SAVINGS FROM FULLY SWITCHING FROM FUEL-BASED LIGHTING TO SOLAR LIGHTING<sup>19</sup>

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702 million people still live under the extreme poverty line of \$1.90 per day, half of whom live in Sub-Saharan Africa, and a third of whom live in South Asia.<sup>1</sup> UN SDG 1 targets the complete eradication of extreme poverty by 2030<sup>2</sup>, and decentralized renewables are indispensable for achieving that goal.

### Decentralized renewables helps families living in the world's poorest communities save money:

- » In East Africa, switching from expensive kerosene, torches and candles to solar lights saves families an average of \$70, or 10% of their income, each year. With more money they can buy food, pay for education, and invest in their livelihoods.<sup>3</sup>
- » Globally, cumulative savings from switching from more expensive alternatives to solar lighting have been calculated at over \$3.5 billion.<sup>4</sup>
- » 200,000 people in 300 villages in India—now powered by biogas-powered mini-grids—save around US\$50 per household per year.<sup>5</sup>
- » In the Philippines, the average solar lantern customer saves \$80 per year, mainly due to savings on kerosene.<sup>6</sup>
- » Switching from diesel generators to renewable sources of energy provides savings for farms and businesses. For example, solar powered water pumps are anticipated to save \$14,000 per acre per year through savings on labor, fuel and fertilizer.<sup>7</sup>
- » Additional savings can be made through the knock on impacts of greater power services in unelectrified areas. For example, travel costs for phone recharging can make up to 50% of a person's expenditure on their phone; being able to recharge mobile phones closer to home can therefore provide savings to families and businesses.<sup>8</sup>

### Decentralized renewables are also reducing poverty by driving income generation:

- » In one study of micro-grid hydropower in Peru, income was found to increase for 60% of connected families, with 23% increasing their income by more than 50%.<sup>9</sup>
- » Through selling solar lights, 600 solar agents in East Africa have had their incomes augmented by 30% on average.<sup>10</sup>
- » In the Philippines, the 37% of solar lantern customers who reported working additional hours at night reported earning, on average, \$340 in additional income each year, equal to 18% of their income. The bulk

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of this increase comes from sari-sari store owners who can earn up to \$4 more per day with the use of solar lighting.<sup>11</sup>

- » Up to 20% of SHS customers in some districts of Uganda use their SHS for income generating activities, such as charging mobile phones for their neighbors.<sup>12</sup>
- » Globally, the pico-solar sector is estimated to already support the livelihoods of 1.6 million people, either through direct employment or through the use of pico-solar products for their businesses.<sup>13</sup>
- » To fully support off-grid households, 2 million jobs in the solar LED sector stand to be created, compared to 150,000 jobs that currently exist in the fuel-based lighting sector.<sup>14</sup>
- » In Zimbabwe, after solar irrigation pumps were installed for smallholder farmers, household incomes increased by 286% for the very poor, 173% for the poor and 47% for middle-income groups.<sup>15</sup>
- » In India, salt farmers who previously spent 40% of their annual revenue on diesel fuel were able to increase their annual savings rate by 161% by using solar pumps.<sup>16</sup>
- » For more facts and statistics on the ways that DRE is increasing jobs, income and productivity please follow the link below:

[Fact Sheet: Jobs and Decentralized Renewable Energy](#)

#### Share the Message

Distributed renewable energy saves families money and can augment their income earning capacity in novel ways, and as such, will be an integral part of achieving poverty eradication in accordance with UN SDG 1. Join Power for All to share these messages:

- » Replacing kerosene lamps with solar lanterns saves families money on fuel, allowing them to purchase other goods and services to stimulate the local economy.
- » Distributed renewable energy can create millions more jobs than traditional fossil fuels, both directly and indirectly.
- » Distributed renewable energy can increase incomes for families, smallholder farmers, and business owners, driving economic development.

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#### Sources:

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