

1 Billion Reasons to Deliver Solar Energy Access for the Poor

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UN Secretary General Ban Ki-moon has proclaimed 2012 the Year of Universal Energy Access. His initiative is critical to the [Rio +20 Earth Summit](#) talks scheduled for June. However if Rio, and the UN SEFA campaign, are to deliver on one of the most important goals of our time they must move beyond the aid trap – that clean energy is too costly for the poor to pay for themselves - and the grid fallacy – that costly grid extensions are the only way to deliver energy for the poor. Because decades of experience have shown that grid extensions have failed and that the best way to bring electricity to the billion or so who lack it — while reducing greenhouse gas emissions — is to provide decentralized clean energy.

This is a message even the International Energy Agency, historically a grid-centric, establishment voice, has admitted to when it says that half of those without electricity today will never be wired. The government of India goes even further estimating that two-thirds of its non-electrified households need distributed power. That however, is not what coal industry propaganda and other grid centric voices would have you believe.

But decades of effort have shown that if we want the poor to benefit from electricity they cannot wait for the grid, or rely on fossil fuels. Instead, they are best served (and ironically can best afford) the most sophisticated lighting — off-grid combinations of solar panels, power electronics, and LED lights. More importantly, solar energy is a proven solution that has been, time and again, tailored to the local needs and conditions of the world's poorest areas.

Fortunately, the historic barriers to getting decentralized clean power to scale in rural and urban poor communities are rapidly being dismantled by progress in technology, finance, and business models. Getting the 1.2 billion people local solar power they can afford is

within grasp — if we only think about the problem in a different way. The benefits will be tremendous - from saved lives, to improved livelihoods to greenhouse gas reductions.

But the real power of this initiative is far larger. If one-fifth of the world is on decentralized clean energy, as these people prosper and can afford more electricity, they are going to expand their decentralized systems – not coal or nuclear. Their neighbors include the one-third of humanity with “spasmodic” electricity — wires that in rural areas work only at night, and in urban areas go down in the afternoon. These customers already find distributed solutions far more reliable than the current grid. If we add those 2 billion to the 1.2 billion who are not on the grid, virtually half of humanity could be turning to clean and renewable power as the cheapest, most reliable and most available form of energy. The fossil fuel interests would lose completely their current moral argument — that more carbon is the quickest and cheapest method to power the poor. We therefore have an opportunity for which the economics are compelling, the moral urgency profound, the development benefits enormous, and the potential leverage game changing. Now the United Nations campaign must seize it.