The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

Final Copy of Case Study

YEAR:
2012

STATUS:
Laureate

Organization:
Schneider Electric

Organization URL:
www.schneider-electric.com/bipbop

Project Name:
Schneider Electric BipBop Program

What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?

When it comes to access to energy, the world is paradoxical and unfair. Two billion people on the planet don't even question the idea of having energy, while 1.4 billion people still do not have reliable access to clean electricity. They are at the so-called "Base of the Pyramid," or the BoP. For them, sources of electricity are polluting and expensive flashlights, kerosene, and wood-based biomass. What is even more unfair is that the poorest people pay the most for energy. At Schneider Electric, we have decided to focus on the development of clean, reliable, and affordable access to energy for the people at the Base of the Pyramid. In 2009, we launched an innovative sustainable program called BipBop, an acronym standing for Business, Innovation, and People at the Base of the Pyramid. By investing in communities and stakeholders at the Base of the Pyramid, Schneider Electric addresses three key issues in providing sustainable access to energy: lack of appropriate equipment by developing an adequate and cost-effective offer; lack of financial resources available for innovative energy entrepreneurs through funding; skills and expertise shortage through technical and business training. The BipBop program is measured using the Planet and Society Barometer. The barometer aims to mobilize Schneider Electric around sustainable development objectives and to communicate the company's results to its stakeholders. Helping the poorest nations access energy and assist their development is one of the key initiatives measured on a quarterly basis, along with all aspects of Schneider Electrics product development, services and global outreach. When launched in 2009, Schneider Electric's

initial grade was listed as a 3 out 10, which has significantly improved to a score of 7.75 at the end of 2011.

Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.

A major technology used in the BipBop program is a solution for village electrification known as Villasol. An example of this technology's implementation can be seen in a pilot project of Villasol that was installed in the rural community of Asore, in Nigeria. The inauguration took place on September 29, 2011, with representatives of Nigerian state's ministry of special duties, the Energy commission of Nigeria and Ogun state government. The Villasol solution is a solar-powered micro off-grid facility for decentralized rural electrification. This standardized solution consists in photovoltaic panels, a battery bank and a battery charging station that enable a communal recharge system. The facility supplies domestic, entrepreneurial and community needs such as schools, health centers, water supply, and public lightings for around 100 households, without connection to the national grid. The lamp and battery system provided for the 100 households comes from In-Diya, a solar home lighting system already commercialised by Schneider Electric in India and Bangladesh. In-Diya features include: - Ability to illuminate a room of 12ft x 12ft uniformly for normal activity. - In the off-grid area people can use In-Diya with a 12V 10Wp solar panel and 12V, 5Ah battery. People connected to an unreliable grid can use In-Diya to have reliable lighting as it provides 8 hours of backup during power failure. - Help people to have the same brightness during low voltage supply from the grid.

Please list the specific humanitarian benefits the project has yielded so far.

Schneider Electric teams in Asore built a tailored solution adapted to the needs of the village: - 24-hr continuous service for lighting and electrical connections for the only school in the village as well as the solar powerhouse. These facilities have direct connection to the Villasol battery station to guarantee power availability at any time. - Fulfillment of the basic households' lighting needs with a portable lamp and battery system that villagers can recharge. As villagers pay for recharging their battery, they pay more attention to their consumption. This lamp and battery system comes from In-Diya, a solar home lighting system already commercialised by Schneider Electric in India and Bangladesh. Together, Villasol and In-Diya provide a green, end-to-end solution for rural electrification. The payback of the Villasol installation in Asore is evaluated around 5 years, thanks to optimized cabling costs and the battery charging station business model. Villasol and In-Diya are developed in the frame of the BipBop energy access program of Schneider Electric.

Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.

Through training, investments and solutions, BipBop has already affected nearly a million people, with thousands now trained in the field of electricity. Below are just a few quotes of those whose lives have been positively affected by Schneider Electric's BipBop program. From Vietnam, Village 61, where 300 people who previously never had access to electricity now have a full-time electricity supply, and where an additional 72 villages hope to receive the same access to electricity over the next three years: "Thanks to the electricity supply, I believe our life will be improved a lot. We are very happy to watch TV, kids being able to do their homework after school and read books at night. In the future we could work and earn more to increase our income." From India, where the ongoing electrician training program hopes to train over 4,000 electricians by the end of 2012: "Before my training I was working as an office boy. Had I still been in the

same job I couldn't have progressed in my life. Thank you Schneider Electric!" In Asore, Nigeria, whose story has been highlighted throughout this application: "Schneider electric has taught this place to be a tourist center because what happened here we've not seen in this village since the creation of this place. Schneider Electric has made our town come alive and we are now the envy of other neighboring towns after many years of neglect."