Rainwater capture and storage for drinking water

an Iberdrola case study

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Company details
Iberdrola SA is a Spanish multinational electrical utility company based in Bilbao, Basque Country. It has been focused on renewable energy in Spain since at least 1901 as the company Hydroeléctrica Ibérica, and Iberdrola SA was formed in 1992 as a result of a merge. It has undergone major transformations to stay ahead of the energy transition and tackle the challenges posed by climate change and the need for clean electricity: it is a world leader in renewable energy, particularly wind power.

Iberdrola SA supplies energy to around 100 million people in the USA, Mexico, Brazil and various other European countries. Their team currently comprises 28,220 employees and in 2016 they generated revenues of USD $3.1billion.

Summary of action
Iberdrola SA is strongly committed to transparency and water stewardship to mitigate risk and increase shared value. For this reason it has modernized 45 of its 92 small hydropower plants, promoted environmental sustainability among suppliers, and joined the Water For All program in Brazil, installing systems to capture rainwater to provide drinking water supplies. Iberdrola SA believes that developing a corporate culture based on sustainable development and establishing permanent ties with all its stakeholders are the cornerstones of its success as an international business.
**Program rationale**
As a signatory of the Global Round Table on Climate Change and the UN CEO Water Mandate, Iberdrola SA champions transparency on water. Iberdrola SA is committed to meeting SDG 6 and sets annual water efficiency targets. Iberdrola understands the interlinkages between water and climate, and replacing less efficient technologies such as conventional thermal generation with renewables is a key strategy across all its operations.

**Program approach**
Iberdrola SA promotes environmental responsibility and strict compliance by suppliers, with an emphasis on the principles established by the UN Global Compact. Iberdrola has also launched an initiative which involves the installation of systems for capturing and storing rainwater for drinking water supplies in the Caetité wind farm Bahia, Brazil. Additionally, Iberdrola SA is committed to R&D and over the last three years has invested USD $11.2million modernising 45 of its 92 small hydropower projects.

**Lessons learned**
By partnering with the Brazilian Ministry for Social Development and Fight against Hunger, Iberdrola’s rainwater harvesting project provides water to over 3,000 people who would not otherwise have had access. Though a huge achievement, water is a valuable resource around the world: rainwater harvesting
Results & Benefits

• **75%** of Iberdrola’s suppliers had Environmental Management Systems in place in 2015.

• **45%** reduction in water consumption in 2015 from their 2013 baseline.

• **3,300+** homes supplied water by the Bahia rainwater harvesting initiative. These homes remain disconnected from the general water system (part of the Water For All program in conjunction with the Brazilian Ministry for Social Development and Fight against Hunger).

across all of Iberdrola’s operations could prove beneficial for many, and would mean that the wind farms harness not one but two renewable resources in their daily operations.

Just as the challenge of storing energy faces wind farm operators, so too could the challenge of storing large amounts of rainwater face Iberdrola. Innovative ways of storing or utilizing said water that do not detract from the immediate environment are therefore areas for future research, as is the continued investment in more efficient technologies (such as Iberdrola’s hydropower plants).

What next?
Iberdrola SA aims to continue establishing a constructive dialogue with government agencies, non-governmental organizations, shareholders, customers, local communities and other stakeholders to:

• Coproduce solutions to environmental problems,
• Help develop useful public policies from the environmental standpoint that are economically efficient, and
• Raise awareness of the importance of taking steps to reduce greenhouse gas emissions.

Source:
https://www.iberdrola.com/about-us/company-profile
BAFWAC was jointly launched by CDP, CEO Water Mandate, SUEZ, and World Business Council for Sustainable Development (WBCSD) in December 2015. The initiative commits companies to analyze and report water-and-climate-related risks and impacts, and to implement collaborative response strategies along the value chain.

bafwac.org