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MCC in Action

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Mongolians Can Breathe a Little Easier this Earth Day

Over the past 10 years, air pollution in the capital of Mongolia has been a growing problem—so much so that Ulaanbaatar now has the second-highest level of air pollution in the world. But the Government of Mongolia and the Millennium Challenge Corporation are working together to provide Mongolians with greater access to green technologies that help reduce air pollution and cut energy costs.

The Energy and Environment Project—part of MCC’s five-year, \$285 million compact with Mongolia—has improved air quality and is benefitting hundreds of households in the capital’s ger (traditional dwelling) districts. The \$45.3 million project, underway since April 2010, seeks to sustainably reduce air pollution by catalyzing a market for energy-efficient and lower-emissions household appliances and by providing financial support to Mongolia’s first commercial on-grid wind farm.



Ulaanbaatar has the second-highest level of air pollution in the world.

The project’s ultimate aim: to make Ulaanbaatar a healthier place to live.

Heating, greening the *gers*

The harsh economic realities of rural life and the explosive growth taking place in the capital have contributed to Mongolia’s rapid urbanization. As the rural poor move into the capital, they tend to do so with their rural lifestyle: living in a ger and heating with a traditional stove.

This migration, combined with urban poverty and one of the coldest climates in the world, led to polluted air. While many city-dwellers live in the comfort of apartments connected to central heating plants, municipal infrastructure has not kept pace. Nearly 180,000 households—about 500,000 people—heat their homes and gers with wood and coal in poorly constructed stoves.

MCC is helping develop a market for improved household appliances by providing subsidies for greener technology. Through this project, MCA-Mongolia has evaluated appliance performance, approved appliances for the program and supported the purchase of more than 63,000 stoves, 18,000 ger insulation sets, 4,000 vestibules, and 86 energy-efficient homes. These results have benefitted more than 70,000 households, and are estimated to help households reduce fuel use by up to 27 percent when using an approved stove and proper insulation.

The subsidies and the public awareness program have also catalyzed consumer choice and demand for high quality, better performing products. Mongolian producers are learning about consumer preferences, improving designs and scaling production capacity based on customer experience. This will lead to greater competition and innovation so that with the expected rise in household income, subsidies eventually will be reduced or ultimately eliminated in favor of a thriving market.



Purevdorj planted trees in his backyard as part of the grants programs for greening and air-quality research.

Out with the old, in with the new

The project also funds the replacement of 15 heat-only boilers (HOBs) at ten sites. The outdated boilers—used to heat a single building or small neighborhoods—create problems similar to household stoves. MCA-Mongolia took inventory of all HOBs in Ulaanbaatar to determine where the impact of replacing a boiler would have the greatest effect, and the boilers should be replaced during the summer of 2012.

The project also includes grant programs for greening and air-quality research. Greening grants are provided to NGOs and schools that prepare proposals for reducing air pollution. To date, grants have paid for 15 schools and NGOs to plant about 18,000 trees in the ger districts. These small grants have sparked a renewal of pride in the ger districts and a beautification of neighborhoods that had been barren for decades.

Last year, eight air-quality research grants were awarded in support of small projects, surveys and studies about air-quality modeling, new technologies and the health impacts of air pollution on children and infants.

Harnessing the wind

To reduce air pollution caused by coal-fired power plants, MCC is helping Mongolians adopt renewable energy by investing in the country's first on-grid commercial wind farm, a 50-megawatt project at Salkhit Mountain just outside of Ulaanbaatar.

MCC is providing network upgrades necessary to transmit and dispatch power from the wind farm to consumers, including a substation, a fiber-optic cable that links the substation with the National Dispatching Center and dispatcher-training simulator and facility. These upgrades are expected to be installed during the summer of 2012 in time for wind power to come online in the fall.

While MCC's investments are already helping clean the air in the city, the long-term problem of air pollution requires a long-term commitment from the Government of Mongolia, including a need to provide improved urban sanitation, road and electric infrastructure. The Energy and Environment Project has provided a strong start, and MCC celebrates Mongolia's bold step toward a brighter, healthier and sustainable environment.