BOB DOPPELT: British city a model for green living

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Woking first came to my attention when Annabelle Malins, consul for science and innovation with the British consulate-general, mentioned the town at an Oregon legislative hearing. Malins said the community of 90,000 about 45 minutes outside of London was one of Britain's leaders in reducing carbon dioxide emissions. Knowing that I would be in London a month later, I set up a meeting.

My first hint that Woking was different was the canopy of solar panels I walked under as I departed the train station on my way to meet Lara Curran, senior policy officer for climate change for the Woking Borough Council (the city government). Despite weather much like Western Oregon's, solar panels have also been installed in the town square, providing energy for local users.

Curran started with a little history. When Woking's program began in the early 1990s, the motivation was not emissions reductions but to save money by improving the energy efficiency of the burough's old government buildings.

About 250,000 British pounds was initially invested in small-scale efficiency improvements such as insulation, lighting and motion detectors. The savings were continually reinvested in larger efficiency improvements, leading to greater savings — and emission cuts. This motivated the borough council to formally expand its focus to include emission reductions.

The council set up a joint public-private energy services company, which built Britain's first sustainable community energy system. It provides power through a combination of renewables and high-efficiency co-generation resources without relying on a national power grid. Woking's system includes solar PV panels, a natural gas-powered combined heat and power plant that recycles waste heat, wind-powered streetlights, and other sources. It supplies energy to the council's own facilities as well as residential and commercial customers. More than 60 energy-generating islands are now dispersed throughout the borough.

A private distribution system that operates separately from the public power grid connects the system's customers. When the public grid goes down, Woking still has energy. The system has saved the council, its residents and businesses more than \$10 million since it started.

In 2002, the council adopted its first official climate policy, which Curran said at the time was "seen as one of the most aggressive in Britain." The plan included ambitious emission reduction goals. Implementation was broken down into "bite-size steps." The cost savings, combined with the clear links staff made between the climate plan and the council's three key goals — providing affordable housing, maintaining quality of life and protecting the environment — were key to its adoption.

Buildings are the largest source of emissions in the community. Much of the climate plan therefore focuses on improving energy efficiency, expanding the sustainable community energy system, and waste reduction.

To improve efficiency, for example, every household in the borough received a questionnaire asking about its building and practices. Each household then received a document outlining how it could improve the home's energy efficiency and reduce waste.

Transportation is the second largest source of emissions, and a much tougher problem to solve. Walking and biking have been emphasized. Woking is now a national "Cycle Demonstration Town." As I strolled around the community a continuous stream of people zipped by me on bikes, many of the riders in suits and ties.

Assisting lower income residents is another key element of the plan. The town adopted a "fuel poverty" policy that helps people pay their energy bills. This helped increase energy efficiency while also contributing to the council's affordable housing goal. The council built a demonstration home, the Oak Tree House, that shows visitors how different high efficiency technologies and building practices can reduce energy and emissions. The council wants 1,000 homes to adopt the methods.

The council's efforts have slashed the town's carbon emissions by 35 percent, and from city government facilities by 77 percent. I asked Curran if she thought Woking could cut emissions by 80 percent, as scientists say will be required to avoid runaway climate change.

"I'm not sure," she responded. "But I'm optimistic. If we can make it easy and accessible to people, if they have the information and tools they need, people can act quickly."

Though Curran seems optimistic by nature, her confidence should be not discounted. She has seen what can be accomplished through innovation, good planning and hard work.

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