

Innovate for a Better World

Nike Energy Efficiency Update 2008



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Since 2001, Nike has been working on measuring, understanding and reducing our environmental footprint; from our supply chain and logistics to our retail distribution and Nike-owned facilities.

Footwear manufacturing is the largest part of our CO2 footprint, and about 35 percent of our footwear is manufactured in China. Achieving reductions is a significant challenge considering even single-digit annual growth in our business makes absolute reductions difficult.

However, we have opportunity in China to work with our contract manufacturing factories to reduce CO2 emissions together. To accomplish this aim, we are working with major contract footwear manufacturers to determine emissions and craft a reduction strategy.

We publicly stated our aim to set climate-reduction goals for footwear contract manufacturing by January 2008. We are behind schedule in meeting this goal, but we are making significant efforts along with the contract factories. As we delve deeper, we have learned that a single goal is not sufficient. Factory operations differ considerably, meaning no one-size-fits-all approach will deliver a meaningful reduction target.

Though the end product is similar, each contract factory has its own mix of manufacturing processes and related energy requirements, which calls for individualized programs. What we need is energy-efficiency expertise and factory-level commitment at each manufacturing location to help agree on goals. As those are set, we will make those targets and commitments public.

In order to understand these complexities, Nike undertook a factory energy-efficiency assessment project in June 2007 to determine energy efficiency opportunities and identify the measurement tools that would help factories lower their energy consumption and CO2 output. Two Vietnamese and two Chinese factories were selected to participate in the early testing phase and this work was completed in 2007.

Nike sought additional expertise for this project by working with the US Department of Energy in China, the World Bank, the Climate Group in China and the Oregon Department of Energy. We also engaged a senior energy efficiency expert, Dr. Yang from the International Energy Association. After spending two weeks at each of the two Chinese factories gathering data, interviewing factory engineers, maintenance teams and senior management Dr. Yang submitted a report to Nike in December 2007.

One important aspect of the project was the installation of wireless monitoring. Rather than manual tracking of power consumption on the factory floor, Nike helped the pilot factories install systems that measure energy use by manufacturing process. The new system provided online reports available in real time, 24 hours a day, 7 days a week.

The report verified energy-efficiency opportunities, along with other key findings:

- Energy-efficiency opportunities were dramatically different between the two contract factories. This finding ruled out the opportunity to take a “cut and paste” approach, requiring Nike to conduct energy assessments for each footwear contract manufacturing factory, prolonging this phase of the work.
- The complexity of footwear manufacturing infrastructure is staggering, containing more than 15,500 motors, 10,000 light bulbs, 6,000 sewing machines, four separate compressor farms, six separate chillers and many large boilers.
- Additional work by an energy-efficiency expert is necessary to develop a “blueprint” for implementing energy efficiency within individual footwear contract manufacturing factories.

This initial, valuable work has led us to committing to a pilot program: targeting one contract footwear factory and implementing the recommendations from the initial energy-efficiency project. We believe this will prove the findings from the project and provide Nike and, vitally, the contract footwear factories with a compelling business case.

The work plan for the pilot is underway and is had been approved by the Nike footwear leadership. Approval by the factory is predicated on finding an acceptable funding mechanism. Once approved we believe it will take four months of planning, blueprinting, ordering of equipment and assigning project accountabilities.

Potential returns on investment with this project are considerable but depend on funding terms and other factors. We are working with the contract factories and others to demonstrate value from the projects and make the case for funding. This will be a key component in our ability to swiftly move forward with the pilot.

Moving forward, we believe the pilot results will provide us with the ability to engage other factory owners, providing them with the proven data and information to demonstrate the environmental and financial benefits of energy efficiency. This is a crucial and essential element of ensuring the success of this project.

In a step towards this aim of engaging Nike’s factory partners five contract footwear factories in China participated in an Energy Efficiency Learning Laboratory in January sponsored by the Society for Organizational Learning, with additional expert content delivered by the Rocky Mountain Institute and other top consultants. Laiwu Steel hosted the workshop in Shandong Province. As a result, contract footwear factories in China will be invited to join a related energy efficiency learning community led by Laiwu Steel with ongoing support from the consultants.

In the coming months Nike is also coordinating visits to contract factories in China for leaders from government bodies, nongovernmental organizations and others in the industry to share the opportunities we are finding.

We are also looking for collaboration opportunities with others in the sporting goods industry and are encouraging the entire industry to take a leadership position on energy efficiency.

By May 31, 2008, we believe we will be able to share a set of reduction goals for the pilot and have the blueprint developed to enable us to roll out the program to other key factories.

The factory energy assessment project has taught us that energy efficiency within footwear contract manufacturing is challenging and complex and must be met with diligence, determination and on going commitment. One of Nike’s earliest ads stated “there is no finish line”, which can be easily applied to implementing energy efficiency within footwear contract manufacturing. Nike will continue to post updates between now and May 2008 regarding specific energy reduction goals for our pilot and the global roll out plan for all footwear contract manufacturing sites.