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SHELBY SHARES: Minnesota company builds a better lightbulb

BY DON SHELBY

Sudhir Singh has had many bright ideas. Moving to Minnesota was one of his best – for him, and for us.

His brilliance won him a place at the prestigious Indian Institute of Technology, often compared directly to MIT. (It's arguably the most competitive university in the world – here's a [“60 Minutes” segment](#) on IIT.)

Singh worked in Africa and Great Britain before accepting a friend's invitation to discover the opportunities in the Land of Lakes.

Bright ideas are Singh's business. He owns LightingHouse USA, a Minnesota-owned and operated company that retrofits old lighting technologies with new, more efficient LED units.

Singh's system can provide the same light for parking lots, warehouses, streetlights and more – but save 70-90 percent on energy costs. Since there are approximately 120 million streetlights (6 billion bulbs) in the United States, consuming more about 28 percent of all electricity generated, a conversion to LED technology seems like a no-brainer.

Singh developed a method of replacing old high-intensity discharge (HID) lighting with LEDs by using almost all of the old system's components. His company makes bulbs in Minnesota that

fit those systems, and he hopes to open a production plant in Eveleth to produce bulbs on a mass scale.

Of course, there is an upfront cost. The LED technology, for the time being, can be as much as three or four times the cost of the older, less efficient systems. Singh says, “The old systems haven’t changed much since Thomas Edison invented the light bulb.”

But, the upfront money can be paid back in as little as four months. The LEDs save on electricity costs, of course. But, because the bulbs last so much longer, replacement dollars are saved. For government operations, the public works folks don’t have to spend as much money on maintenance.

Singh’s bright ideas have won his company honors from the Minnesota Cup, the Clean Tech Open and Tekne Awards. It has also won him a grant from the state of Minnesota to demonstrate the technology in Hibbing.

The company says the smart LEDs lights can cost an entity about \$5,000 to light 100 fixtures, compared to \$43,000 with the HIDs.

There’s more. Singh notes that the LEDs don’t heat up, so the cost of cooling a building comes down.

That is one of the reasons that the Duluth Transit Authority used LightingHouse to outfit its big bus barn. That’s why cities from Buffalo and Burnsville, all the way to Virginia and back to Woodbury have used Singh’s systems. Singh tells me one of the selling points of the system is that a number of banks offer low-interest loans to tax-exempt entities to pay for the retrofit.

Singh says, “The more a light is used, the more the system saves.” He makes the case that both environmentalists and conservative business owners like to hear: The product is recyclable, has no pollutants and conserves energy requiring less combustion of fossil fuels, and it saves operational costs and adds to the bottom line.

Don Shelby is a veteran Twin Cities journalist and a radio newscaster for BringMeTheNews. He worked for 32 years as anchor, investigative reporter and environmental correspondent for WCCO-TV, and for 10 years as a radio personality for WCCO-AM. He has won numerous professional awards, including two George Foster Peabody awards.