

Orio LED

**Designer Streetlights** 

submited by: Dheeman Barua

#### PRELIMINARY SCREENING

#### Compatibility with the promoter:

- ➤ 'Orio', a product driven by innovation, which goes in line with the company's mission to provide greener, efficient and energy saving alternatives.
- ➤ Based on LED technology, 'Orio' does provide a bright prospect of growth and high return in the near future.

#### Consistency with Governmental Priorities:

- > Eco friendly
- > High energy savings





Comparison of light-emitting diode (LED) streetlights to high-pressure sodium (HPS), metal halide, and induction lamps

Light Technology:	LED	HPS	Metal halide	Induction
% of U.S. streetlamps: (total: 131 million)	Less than 1	39	27	6
Cost per bulb (USD):	9 to 322	12	27	280
Wattage:	105	150	162.9	109
Bulbs per 100,000 hrs.: (vs. one induction)	1.7	4.17	8.28	1
CO <sub>2</sub> per 100,000 hrs.: (million kg)	300	450	500	320
NO <sub>x</sub> per 100,000 hrs.: (million kg)	1.1	1.6	1.7	1.15
CFCs per 100,000 hrs.:	4.5	6.4	6.8	4.7
Ecotoxicity: (million kg of 2,4-0/100,000 hrs.)*	175	240	260	180
Respiration Impact: (thousand kg of PM2.5/100,000 hrs.)**	90	100	110	95
Color temperature, brightness: (degrees Kelvin)	5,000	2,000	3,000-4,000	5,000

Ecotoxicity was expressed in kilograms of 2,4-Dichlorophenoxyacetic (2,4-D), a common herbicide.

\*Respiratory impact was expressed in kilograms of particulates designated as "fine," or less than 2.5 microns in diameter (PM2.5).

#### Adequacy of market:

- > Wipro lighting has a domestic market share of 60% in LED street lighting.
- > Orio LED is a smart choice for
- campus lighting
- secondary road
- residential area lighting
- Industries Hospitals & Healthcare
- Hotels & Resorts

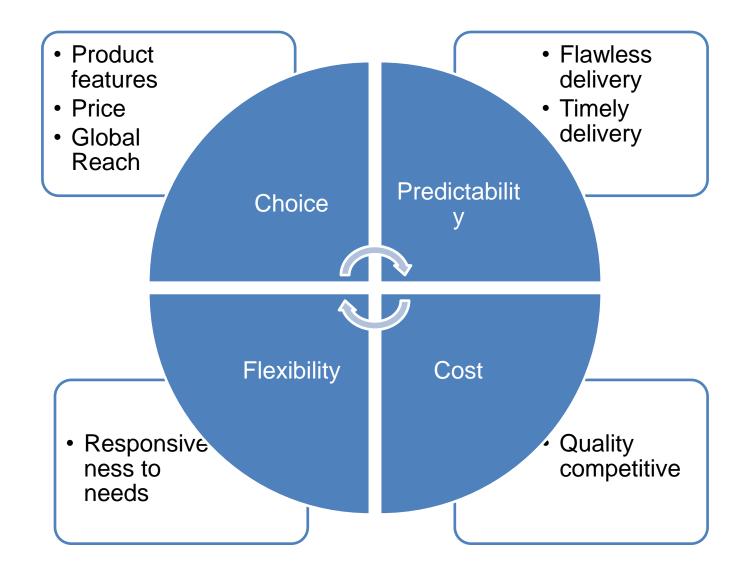
#### Reasonableness of cost:

The rising costs of raw materials have been adjusted by the company 's innovative product line.

#### Acceptability of risk level:

- LEDs Technology yet not accepted by domestic players.
- LEDs are expensive compared with other light sources
- LEDs must be supplied with the correct current. This can involve series resistors or currentregulated Power supplies.

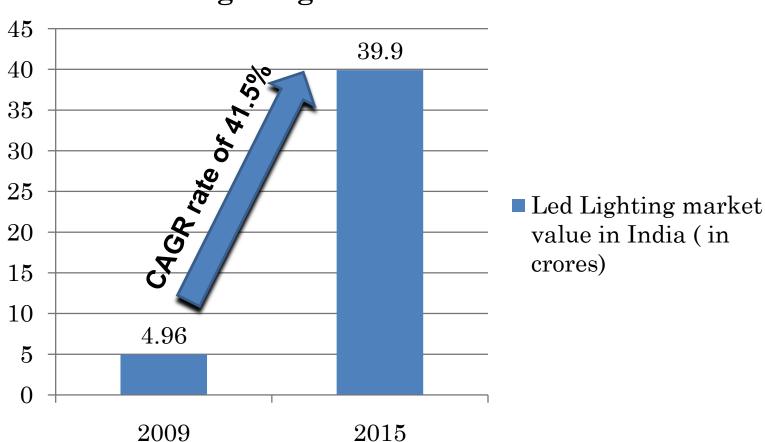
## **KEY DETERMINANTS**



## MARKET GROWTH POTENTIAL

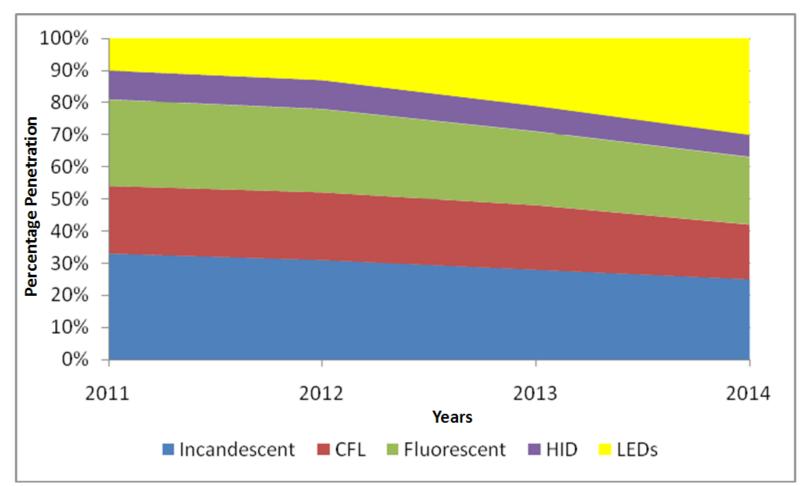
#### > Increase in number of potential customers

#### Led Lighting market value in India



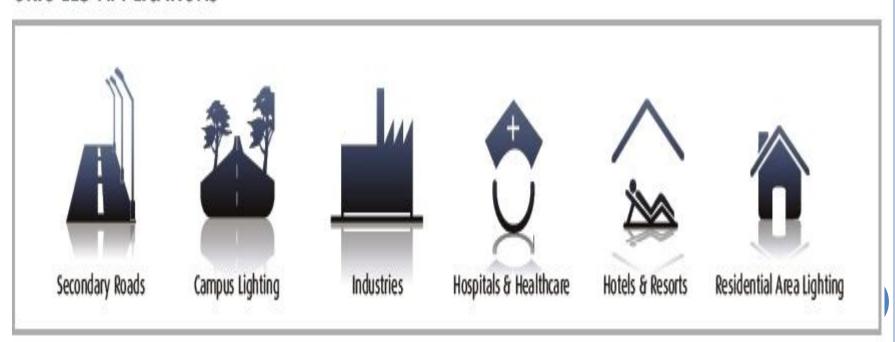
#### 'LED' THE FUTURE

Lighting Market penetration – Total worldwide stock



➤ Recently, the company has started work on lighting projects at the Delhi International Airport and Mumbai International Airport.

## ORIO LED APPLICATIONS



#### INCREASE IN CUSTOMER ACCEPTANCE

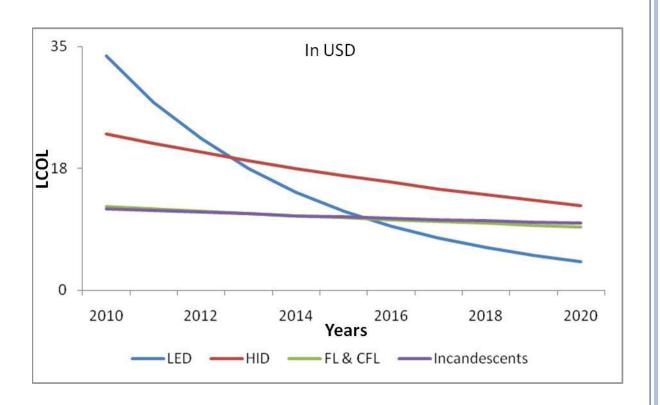
- > Key drivers for adoption:
- > Policy:

Governments around the world are banning older, inefficient lighting technologies and subsidizing the retail price of more efficient types.

> basic economics :

Economic trends affecting LED adoption:

- continuing decline of LED retail prices compared to incumbent technologies where prices are flat or are declining much more slowly.
- > Shrinking pay back periods



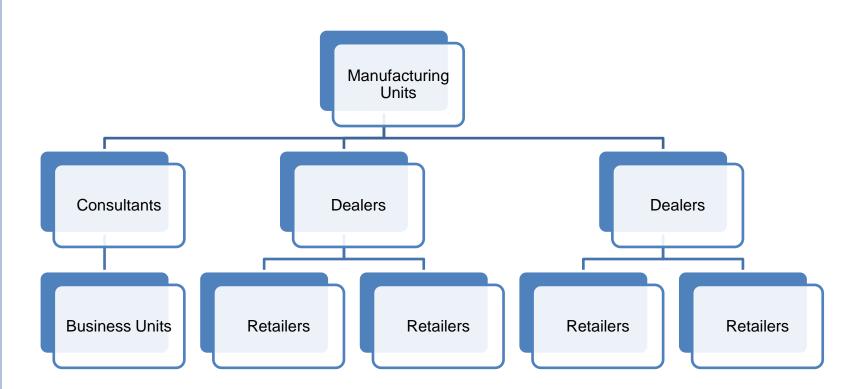
LOCL =Selling price of a fixture + Operational costs + Cooling offsets + Maintenance costs + Replacement costs

> high energyuse market segments: **Comparing** LOCL (lifetime cost of lighting), LEDs beat all its competitors by 2016.

## PRODUCT NEWNESS AND DESIGN

- Orio won the coveted 'Design for Asia Merit Recognition Award 2010' in Product Design category for the most influential good design in Asia.
- Eco friendly solution due to zero mercury content
- Green by design due to 90% recyclability after end of useful life
- > Contains 35% recycled materials
- > Has the 'LED' advantage leading to high energy savings than conventional sources

# **DISTRIBUTION CHANNEL**



- > Wipro follows 'Push Strategy' in distribution
- ➤ Customer centric organization, has a dedicated team called Customer Advocacy to address unforeseen challenges
- ➤ Channel Motivation by providing incentives through margins and credit delays.

# Advertising:

Trade shows

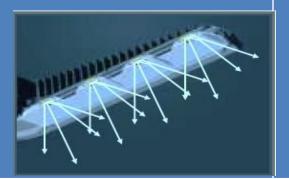
LED expos

Architectural trade shows

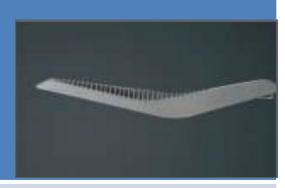
Light shows

### TECHNICAL ANALYSIS

Street lighting optics with uniform Illumination



Stylish & compact luminaries' for modern cityscapes



Maintenance free long service life



Green by design: Orio LED is up to 90% recyclable and consists of 35% recycled materials.



#### PRODUCT FEATURES

- > high energy savings and reduced carbon footprints
- good street lighting optics with high power, high efficiency LEDs (greater than 100 lumens per watt)
- ➤ Ensuring maintenance free long service life 70% lumen maintenance at 50000 burning hours
- > Improved night visibility
- > Significantly longer lifespan
- Reduced maintenance costs
- ➤ Instant-on with no run-up or re-strike delays
- > No mercury, lead or other known disposable hazards

Factors	Wts	Rating								Factor Score		
		10	9	8	7	6	5	4	3	2	1	
Input availability	0.20			$\sqrt{}$								$0.20 \times 8 = 1.6$
Reasonableness of cost	0.10					$\sqrt{}$						$0.10 \times 6 = 0.6$
Adequacy of Market	0.10					$\sqrt{}$						$0.10 \times 6 = 0.6$
Distribution Channels	0.05			$\sqrt{}$								$0.05 \times 8 = 0.4$
Delivery	0.05		$\sqrt{}$									$0.05 \times 9 = 0.45$
Advertising	0.05			$\sqrt{}$								$0.05 \times 8 = 0.4$
Technology	0.15	$\sqrt{}$										$0.15 \times 10 = 1.5$
Government Policy	0.10	$\sqrt{}$										$0.10 \times 10 = 1$
Stability	0.10			$\sqrt{}$								$0.10 \times 8 = 0.8$
Dependency on firm's strength	0.10	$\sqrt{}$										$0.10 \times 10 = 1$

# Thank You