

PHILIPS

New Growth areas in Automotive,
Special Lighting & UHP

Bas van de Kieft

CEO Business Group Automotive, Special Lighting & UHP

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Scope of the Business Group

- **Automotive applications**
 - Product range of Signaling and Head-lighting Xenon, Halogen, LED modules
- **Special Lighting applications**
 - Optical: Film, entertainment and Optical industry
 - UV: Disinfection, Medical and Sun-tanning and UV body care
 - IR: Zone heating, Infrared Sauna, Animal rearing, Semiconductors, bottle blowing
 - EUV: Philips Extreme Ultra Violet for next generation Wafersteppers
- **Consumer Electronics applications**
 - LCD Backlighting
 - Digital projection

Common characteristics / Key drivers for success

- Co-operation with leading customers across the globe
- Leading in innovation
- Excellence in execution
 - Supply performance
 - Quality performance
- Integrated system approach where this adds value
- Exploring new technologies: LED modules, OLED, lasers

Automotive applications

Car production grows with 3% but
the Car lighting market grows faster: 8%

Driven by

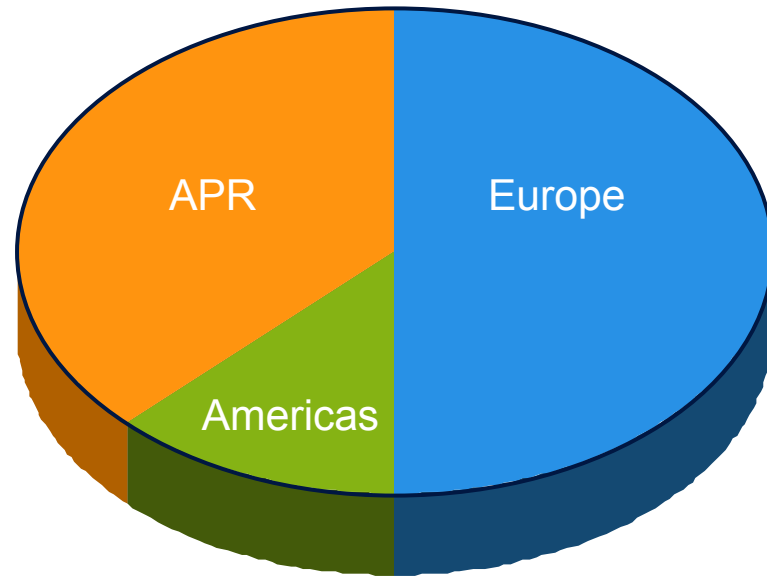
- Safety
- Comfort
- Design

Leading to

- New functions
- More lamps

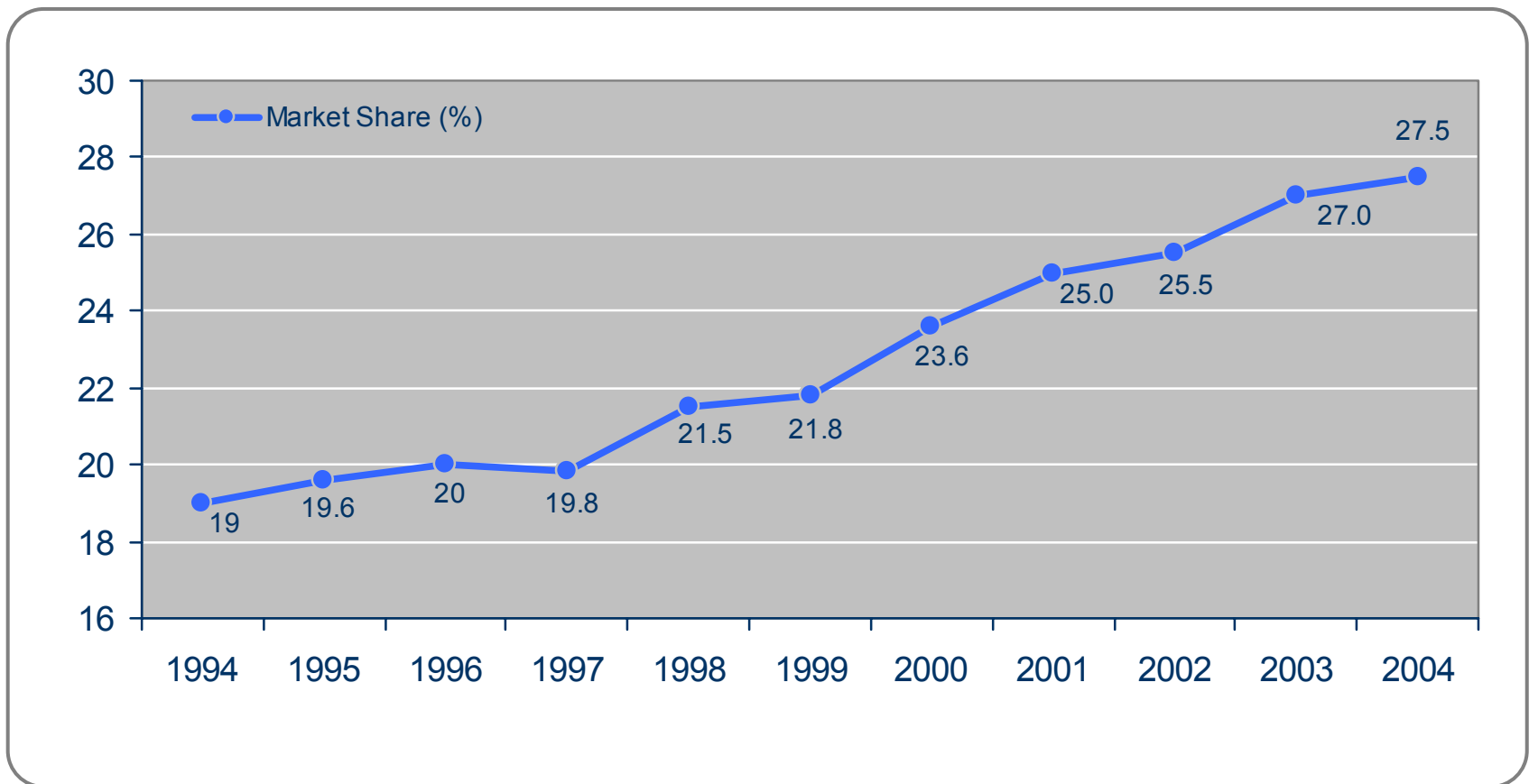
Philips Automotive Lighting: Sales & Market share

Market position	
Europe	# 1
Nafta	# 3
Latam	# 1
Asia Pacific	# 1
Worldwide	# 2



Market leader OEM Japan,
China, Korea, India

Market Share Development BU Automotive 1994-2004



Examples Automotive customers



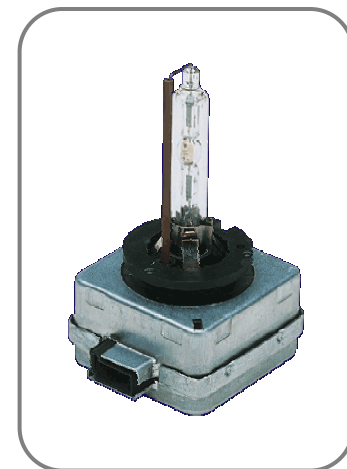


Trends in head-lighting: Safety & Comfort

Xenon

- Invented by Philips
- World No 1 supplier
- 1st in Hg-free (Toyota)

- 2.5 more light output than halogen
- 50% less energy





Trends in interior lighting: Design & Comfort

Evolution

from task lighting only ...
 ... to **ambient lighting**,
 orientation lighting, ...





Trends in car lighting: Car life & Design

HiPerVision:

A breakthrough in signaling

- Car life
- Low energy
- Small size
- New design opportunities



Trends in after market: Safety & Comfort

NightGuide



- Strong fit with new Philips Brand Positioning
- Extensive media coverage
- Further strengthens leadership in safety segment in After Market



1. Safety Zone
2. Information Zone
3. Comfort Zone

Front page “De Telegraaf”!

Philips komt met revolutionaire nieuwe autolamp

door
Adriaan Janszen
FRANKFURT,
woensdag
Philips heeft een
revolutionaire
lamp voor autobete-
ters op de markt
gebracht, die het
licht van de be-
stuurder 's nachts
anzienlijk moet verbeteren.

De lamp, nightguide ge-
naamd, bereikt dat door drie
poorten licht uit te stralen:
voor wit licht recht vooruit
voor een veiliger zicht op de
eigen rijbaan, iets geleer licht
meer naar links om verblin-
ding van tegenliggers te voor-
komen en blauwig licht naar
rechts om borden en wegmar-
keringen langs de weg beter te
kunnen reflecteren.

Volgens de bedenkers bij
Philips een revolutie in de au-
toverlichtingstechniek. Tot nu
toe was de lichtopbrengst van
autolampen beperkt tot één
poort licht. Na de gewone gloei-
lampen waren dat de laatste ja-
ren die van het halogeentype.

Zie verder pag. 6 kol. 2

Lamp met verschillende kleuren schijnsel

Blauw licht naar rechts maakt zicht op verkeersborden beter.

Wit licht centraal voor optimaal zicht op de weg.

Geel licht naar links vermijdt verblinding van tegenliggers.

HET WEER
BUIEN

Kans op onweer

Af en toe zon

Vrij krachtige westelijke wind

ZON ONDER 19:53, MORGEN OP 07:14

DONDERDAG T/M ZONDAG

Overwegend droog en geleidelijk meer zon, maar in de loop van het weekeinde opnieuw een toenemende kans op een bui.

UITGEBREID WEER PAGINA 10



Trends in car lighting: Design & Car life

LED

- LEDs are increasingly used in rear light and signaling applications ...
... and will ultimately be applied in head lighting
- Increased co-operation Philips Automotive and LumiLeds including LED modules

Quality is key driver for success

- The average '03 level of rejected bulbs @ carmaker is < 1 ppm
 - # of supplied bulbs → 405.000.000 pcs
 - # of rejected bulbs → 383 pcs
- Close co-operation suppliers / set makers to reach **zero** defects

Lamps for special applications



Optical

Entertainment
Lighting

Studio

Theatre

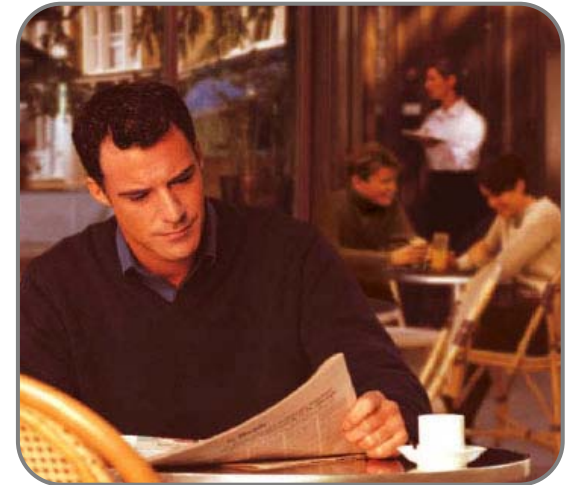


UltraViolet

Bodycare

Medical
(eg psoriasis)

Disinfection
(water/air)



InfraRed

Semicon

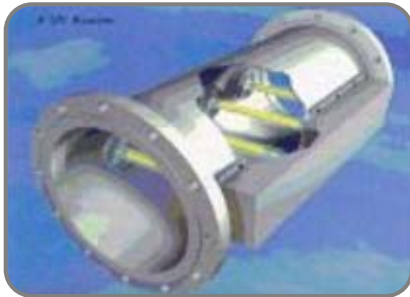
Bottleblowing

Sauna's

Terrace Heating

A fast growth area: Water & air disinfection applications with UV light

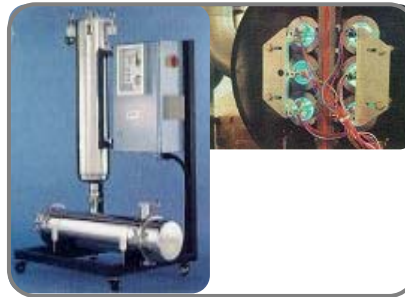
Water purification



Municipal water



Domestic water



Bottle /Ultra Pure water

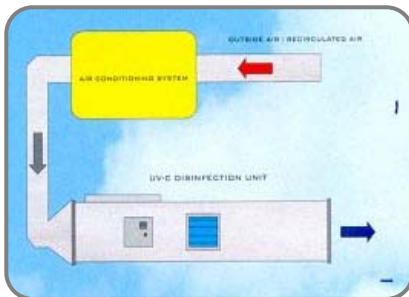


Waste water

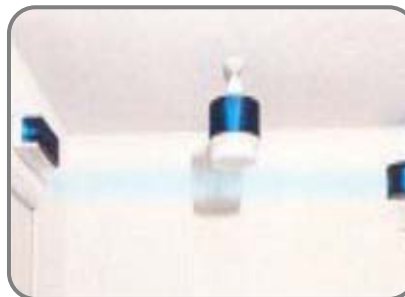
Air purification



Cooling coils



Forced air/HVAC



Upper air



Domestic stand alone air purifier

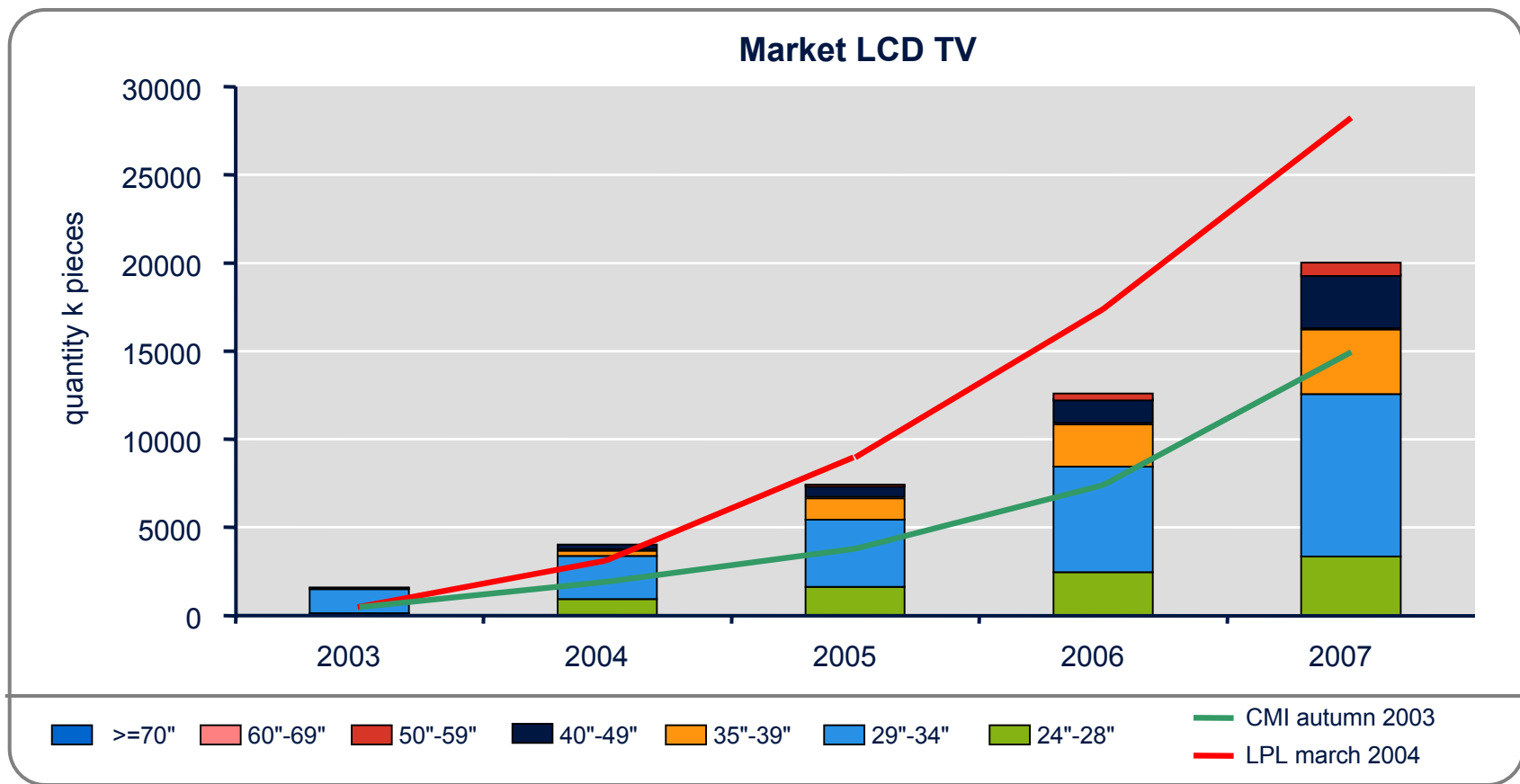
Philips Extreme Ultra Violet for Next generation Wafersteppers (2007)

Co-operation ASML



Consumer Display Applications

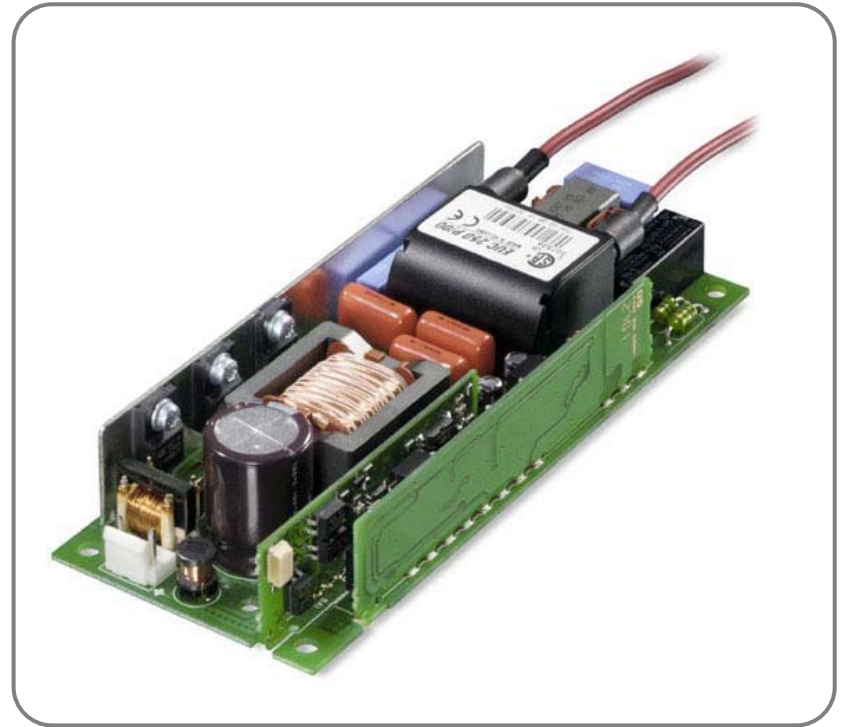
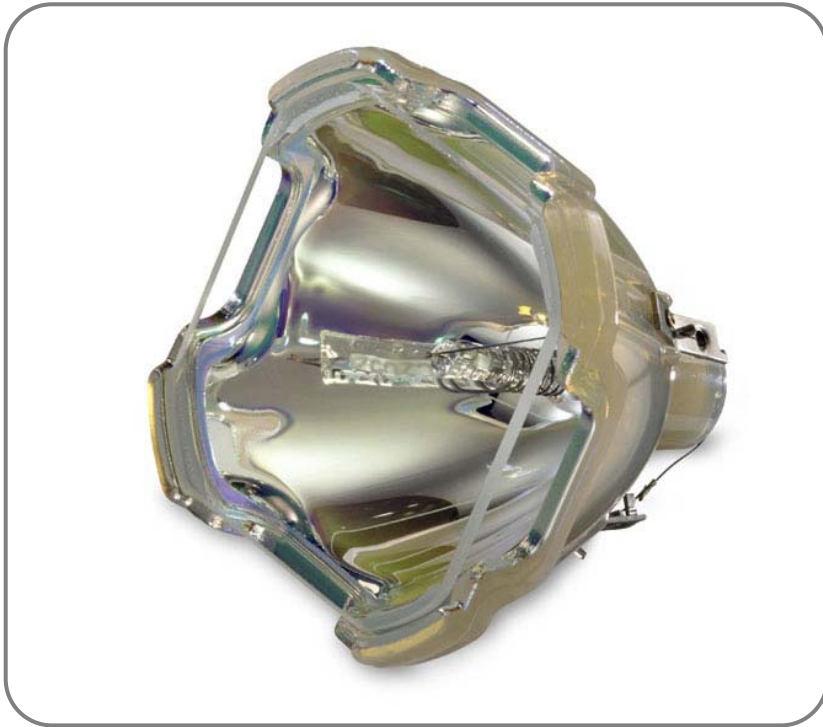
LCD backlighting systems: a fast growing opportunity
















Philips preparing to enter LCD backlighting systems market

- Fast growing larger screens
- Competences regarding lightsource, luminaire, electronics, optics
- Breakthrough innovation expected early 2005
 - Sharper moving images
 - Higher brightness
 - Higher contrast
 - Wider viewing angle
- Close co-operation LG – Philips LCD





1995: Philips invents UHP Projection Light System



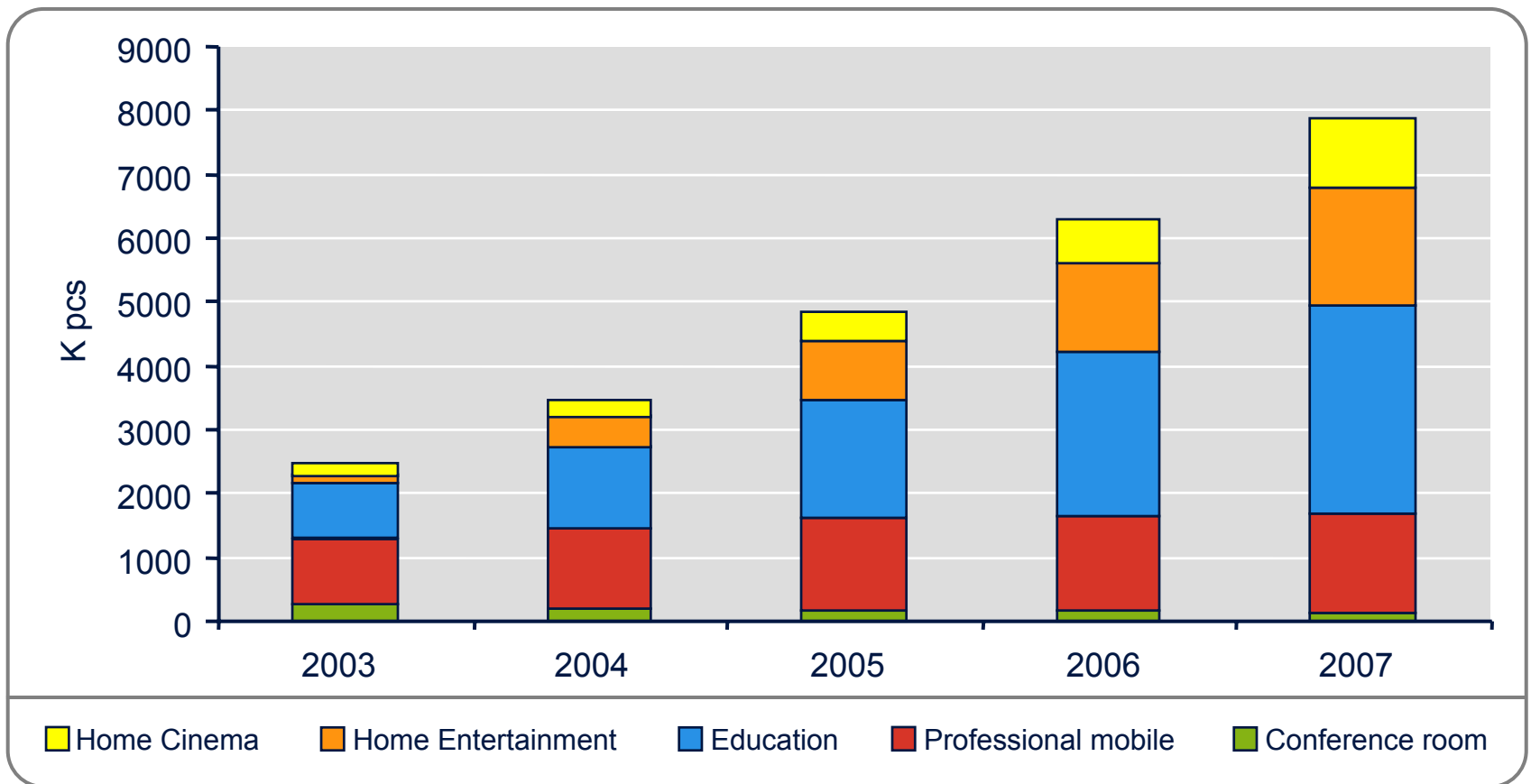
Philips Lighting created the data projection market and is now creating the digital rear projection TV market

Market	Segment	Application	
		Front Projection	Rear Projection
Consumer	Home Cinema		
	Home Entertainment	 	
	MD-PTV		 
Professional	Conference Room	 	
	Mobile Professional	  	
	Education	 	
	Video-Wall		

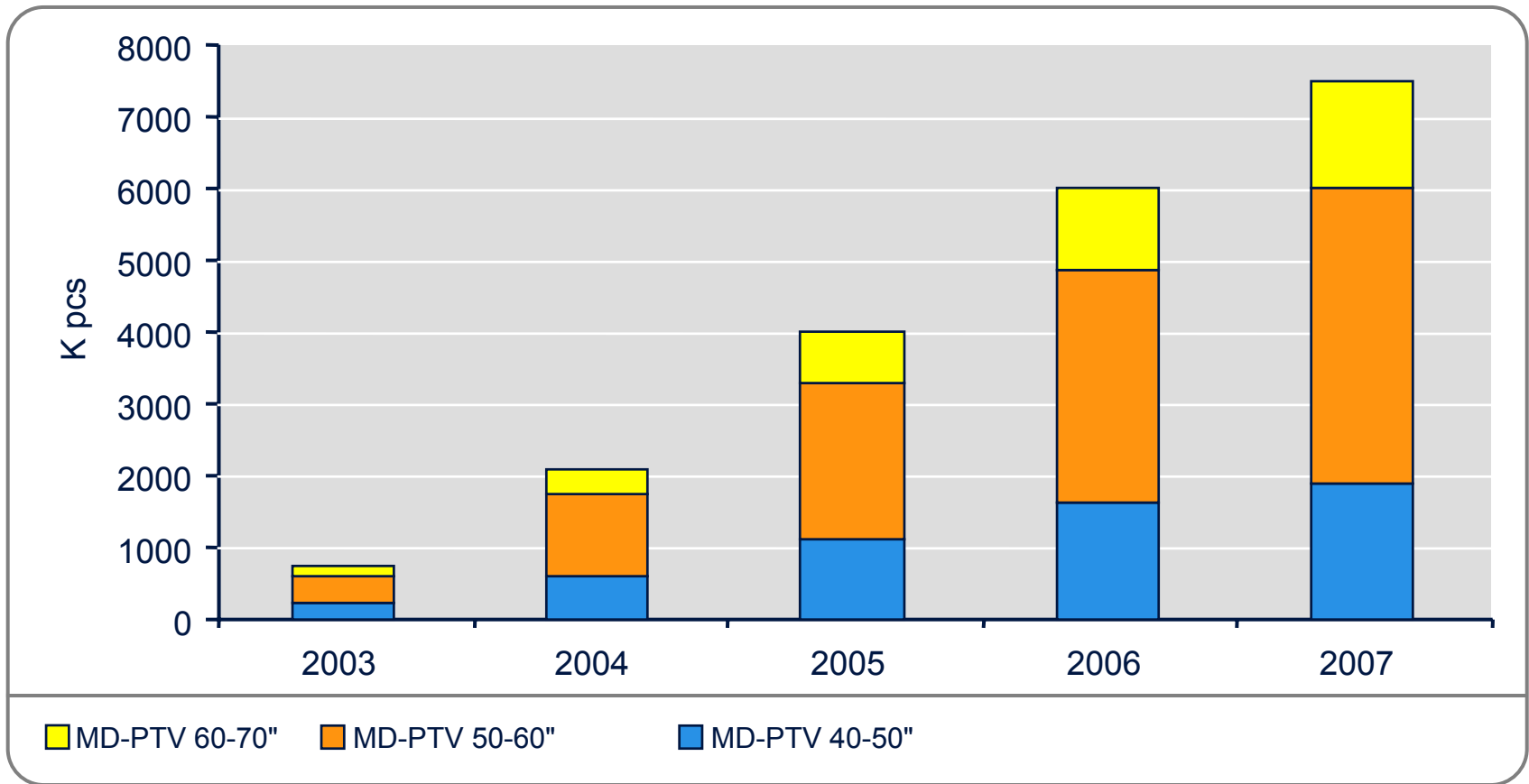
UHP Market key customers

Market	Segment	Application	
		Front Projection	Rear Projection
Consumer	Home Cinema	EPSON [®]	   
	Home Entertainment	InFocus [®]	
	MD-PTV	SANYO	
Professional	Conference Room	<i>Coretronic</i> DELL [™]	
	Mobile Professional	hp BENQ	
	Education	NEC	
	Video-Wall		

Market Overview: Front-Projection Market Fcst



Market Overview: Rear-Projection Market Fcst





Digital Rear Projection TV at Home

Philips Lighting

Market share 2004: 70%

Key strategy UHP

- Profitable growth
- Strong investments in R&D (+30% in 2005 vs. 2004) to remain leading in IP, support new product design and development of new technologies (e.g. lasers)
- Strong investments in capacity expansion in Belgium (lamp burners) and China (assembly/electronics)

BG Automotive, Special Lighting & UHP

Sales 800 M Euro with

- average 11% comparable growth 2000 – 2004 through
 - leading customer across the globe
 - strong innovation
 - excellence in supply / quality
- above average profitability

