Lighting Strategy:
Accelerating profitable growth
Building on strength in existing businesses
Shaping the future in new business areas

Theo van Deursen
CEO Philips Lighting
Lighting analysts’ day
September 20, 2006
Agenda

• Philips Lighting: accelerating profitable growth

• Building on Strength
  – Growth in emerging countries
  – Business to business
  – Energy saving solutions

• Shaping the Future

• Profitable growth via key business drivers

• Conclusions
Philips Lighting

• Our Mission

  We understand people
  …and improve their lives with lighting

• Our Vision

  The Clear Leader;
  Setting the pace in the lighting industry
Philips Lighting

Sales
2005
EUR 4.8 billion
2006 Q2YTD
2.6 billion

EBIT
EUR 556 million
or 11.6% of sales
353 million
13.3%

Comp Growth:
Avg. ’96-’03 < 2%
’04-’06YTD 5%
Target 6%
Philips Lighting

Key Product Areas

- Lamps
- Luminaires
- Solid State Lighting Modules
- Lighting Electronics
- Automotive & Special Lighting Applications
- Lumileds
Philips Lighting
2000-2005 Sales distribution by region

2000
- Europe: 54%
- Asia: 16%
- Latin America: 5%
- North America: 25%

2006 Q2YTD
- Europe: 47%
- Asia: 21%
- Latin America: 5%
- North America: 27%
Philips Lighting

*Lumileds: Increases Philips Lighting growth by 1%*

2006 Q2YTD

- Lamps: 46%
- Luminaires: 16%
- Lighting Electronics: 15%
- Automotive & Spec. Lighting Applications: 17%


- Lighting: 5%
- Lumileds: 24%
- Combined: 6%

Lighting analysts’ day, Eindhoven, September 20th, 2006
Philips Lighting

*Organic growth with supporting acquisitions*

**Acquisition of Bodine:**

- To complement our portfolio in Lighting Electronics, we acquired Bodine, USA (July 2006)
- Leading player in emergency lighting
- Opportunity for growth in integrated and controllable lighting solutions for use with building management systems
- Sales USD 30 mln, 200 employees
Philips Lighting

Sales distribution by application

- Homes: 23%
- Office: 19%
- Outdoor: 13%
- Hospitality: 4%
- Industry: 12%
- Transport: 11%
- Other: 6%
- Shops: 12%
**Philips Lighting: leading around the world**

*Value market shares per business per region 2005/2006*

<table>
<thead>
<tr>
<th>Business</th>
<th>W. Europe</th>
<th>E. Europe</th>
<th>N. America</th>
<th>L. America</th>
<th>Japan</th>
<th>Asia/Pacific</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamps</td>
<td>number 1</td>
<td>number 2</td>
<td>number 2</td>
<td>Not Applicable</td>
<td>not in top 3</td>
<td>not in top 3</td>
<td>Total</td>
</tr>
<tr>
<td>Luminaires</td>
<td>Not Applicable</td>
<td>number 2 or 3</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Total</td>
</tr>
<tr>
<td>Lighting Elec.</td>
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<td>number 1</td>
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<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
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<td>Automotive</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
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</tr>
<tr>
<td>Special L. Apps</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
<td>number 1</td>
</tr>
<tr>
<td>HB LEDs</td>
<td>number 2</td>
<td>number 2</td>
<td>number 2</td>
<td>number 2</td>
<td>number 2</td>
<td>number 2</td>
<td>number 2</td>
</tr>
</tbody>
</table>
Philips Lighting

*Strategy*

- **Driving profitable growth** via

- **Building on strength**
  - In emerging countries
  - In Business to Business
  - With energy saving solutions

- **Shaping the future**
  - In display applications
  - With Solid State Lighting (LEDs, OLEDs, lasers and systems)
Philips Lighting

Strategy

• Building on strength, Shaping the future via

• Key business drivers
  – End user driven innovation, building on technology leadership
  – Marketing excellence (Customer focus, Brand, Market introduction)
  – Supply excellence (Sourcing, Manufacturing, Delivery)
  – Control of costs and assets

on basis of:

  – Committed and competent people, living our values
  – A learning organization (continuous improvement)
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Building on strength
Sales growth in emerging markets

<table>
<thead>
<tr>
<th>Region</th>
<th>2005 vs 2004 comparable growth</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latam</td>
<td>4%</td>
<td>30%</td>
</tr>
<tr>
<td>C&amp;E Europe</td>
<td>11%</td>
<td>32%</td>
</tr>
<tr>
<td>China/HK</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>India</td>
<td>14%</td>
<td>37%</td>
</tr>
<tr>
<td>Asean</td>
<td>16%</td>
<td>35%</td>
</tr>
<tr>
<td>Other emerging countries</td>
<td>22%</td>
<td></td>
</tr>
</tbody>
</table>

The sales in emerging markets represent 31% of Philips Lighting sales
Building on our Strength

Market Share Development of Automotive business 1995-2005
Building on strength

*Strength in B2B general lighting application segments*

- Shops
- Offices
- Healthcare
- Industry
- City Beautification
- Road
- Sports & Open Areas
Building on strength

*Shops - Enhancing the shopping experience*

**Strengths:**
- Flexible ambience-creating systems
- Lighting design capabilities
- Dedicated international key account management
Building on strength

City Beautification - Improving the quality of urban life

Strengths:
- Dynamic and energy saving solutions
- Architectural lighting design capabilities
Building on strength

*Offices - Enabling well-being and performance*

**Strengths:**
- People oriented dynamics (day light rhythm)
- Energy saving lighting solutions/controls
- Turnkey projects with tailor-made product solutions
Building on strength

*Industry - Enabling well-being and productivity*

**Strengths:**
- Application knowledge
- Energy-efficient solutions
- Dedicated International key account management
Building on strength

*Roads - Creating safety and comfort*

**Strengths:**
- Energy-efficient solutions, (e.g. Cosmopolis)
- Reducing light pollution
- Leading global player in road lighting
Building on strength

*Healthcare - Ambient Experience*

**Strengths:**
- ‘One-Philips’ approach (e.g. Philips Medical Systems)
- Ambience-creating design capabilities
- Project management
Building on strength

Sport: optimal experience also in front of your TV

Olympic games 2004 Athens
28 out of 33 venues (85%) with Philips Lighting

Fifa Worldcup 2006 Germany
8 out of 12 venues with Philips

Olympic games Beijing 2008
Philips Lighting taking the lead
Building on strength

*Demand for energy saving solutions*

- Different regional accents on need for energy saving:
  - **Scarcity** (Americas)
  - **Booming demand** (Asia Pacific)
  - **Climate change/Kyoto** (Europe; global)
  - **Oil prices** (global)
Building on strength

*Lighting is important part of energy consumption*

- Lighting 19% of world-wide electricity consumption
- Electricity prices are rising fast
- Electricity consumption is rising fast

![Pie chart showing lighting and other electricity use](image)

![Graph showing electricity retail prices](image)

Source: Elektrabel
Building on strength

*Lighting Electricity Consumption*

**Total world consumption 2005: 2550 TWh**

- **Nafta**: 33%
- **Europe**: 25%
- **Asia excl. Japan**: 27%
- **Japan**: 5%
- **Rest of World**: 5%
- **Latam**: 5%

*Source: International Energy Agency (IEA)*
Building on strength

Total Europe: untapped potential of existing lighting technology

Today’s potential savings

- 13.4 billion Euros in Electricity costs/year
  (20% savings @ EUR 10 cts/KWh)

- 59 million tons of CO₂ emissions/year
  – Equivalent of more than 2.9 billion trees

- More than 284 million barrels of oil/year

- Output of more than 67 power plants (@ 2TWh/yr)

Sources: International Energy Agency (IEA)
World Resource Institute (WRI)
Building on strength

*Worldwide: untapped potential of existing lighting technology*

**Today’s potential savings**

- 51 billion Euros in electricity costs/year  
  (20% savings @ EUR 10 cts/KWh)

- 273 million tons of CO₂ emissions/year
  – Equivalent of more than 13.6 billion trees

- More than 1080 million barrels of oil/year

- Output of more than 255 power plants
  (@ 2TWh/yr)

Sources: International Energy Agency (IEA)  
World Resource Institute (WRI)
### Building on strength

*For each customer segment an energy efficient lighting solution exist already today*

<table>
<thead>
<tr>
<th>Area of lighting</th>
<th>Energy saving</th>
<th>CO2 savings per lamp per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road lighting</td>
<td>HPL, 57%</td>
<td>109 kg CO₂</td>
</tr>
<tr>
<td>Shop Lighting</td>
<td>Halo, 80%</td>
<td>115 kg CO₂</td>
</tr>
<tr>
<td>Office &amp; Industrial Lighting</td>
<td>TL8, 61%</td>
<td>77 kg CO₂</td>
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<tr>
<td>Home Lighting</td>
<td>GLS, 85%</td>
<td>34 kg CO₂</td>
</tr>
<tr>
<td>LEDs</td>
<td>GLS, 82%</td>
<td>34 kg CO₂</td>
</tr>
</tbody>
</table>
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• Philips Lighting: accelerating profitable growth

• Building on Strength

• Shaping the Future
  – Display: LCD backlighting & projection
  – Solid state lighting

• Profitable growth via key business drivers

• Conclusions
Shaping the future – Display applications

*Growth in LCD backlighting*

Philips Aptura for LCD backlighting systems,
New fluorescent solution for LCD
Creating a new viewing experience

- Wider viewing angle
- Better contrast
- Less motion blur

- Launched Q1 2006

- Philips ClearLCD TV Video Innovation of the year ’05-’06 (EISA)
Shaping the future – Display applications

*The LCD TV market is growing fast*

![Bar chart showing the growth of the LCD TV market (>=40”) from 2005 to 2010. The market volume is in million units.](chart.png)
Shaping the future – Display applications

Digital projection

Digital Rear Projection TV

Digital Front Projection

Market in units * thousand

<table>
<thead>
<tr>
<th>Year</th>
<th>MDTV LED</th>
<th>MDTV</th>
<th>Front LED</th>
<th>Front</th>
</tr>
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<tbody>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2007</td>
<td></td>
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Shaping the future – Solid State Lighting

A brief history of (white) light sources

- Open wood fire
- Oil
- Filament
- Gas discharge
- In-organic LED
- Organic LED
- Solid State Laser
The in-organic Solid State Lighting value chain

LED Components
- Die
- Single Package or Chip-on-submount

LED Modules & Systems
- Source, optics, driver and controls
- Luminaires Systems Projects

End-user
Shaping the future – Solid State Lighting
_Lumileds’ leadership in high power in-organic LEDs_

• JV established in 1999 (initial Philips investment approx. USD 90 mln)

• Philips increased ownership to 96.5% in November 2005 (additional investment approx. USD 950 mln)

• Industry leader in high power LEDs (LUXEON platform) in all colors and white
Shaping the future – Solid State Lighting
The In-organic LED system illumination market

World-wide: Business and residential

Estimated by Philips at 6 times the LED component market as stated by Strategies Unlimited; PennWell.
Shaping the future – Solid State Lighting

*Modules: To create breakthroughs for LED adoption in cars*

Drive down integral cost

Create opportunities for differentiation

Example:
Shaping the future – Solid State Lighting

*Modules: Retrofit solution for Freezer Lighting*

Currently being developed:

- Up to 60% lower energy use
- Longer life, Over 6 years @ 24/7
- No mercury, lead
Shaping the future – Solid State Lighting

Modules: Retrofit Applications
Shaping the future – Solid State Lighting

To create atmosphere at home: IMAGEO

- Candle-like ambience without flames
- Last more than 24 hours, before recharging
- Rechargeable without taking the LED out of the glass
- Switch on/off by tilting the glass

The intimacy of candlelight - from an LED light source
Shaping the future – Solid State Lighting
Systems: to create Lighting solutions especially in decorative outdoor and shop lighting…
Shaping the future – Solid State Lighting

*Systems are crucial in understanding the market*

- Gathering vital information about SSL market trends requires footholds in all major markets (regional and application segments)
- Our Luminaire activity creates lighting solutions
- They function as our spearhead in developing the SSL technology
- Enabling us to create optimal products for our customers
Shaping the future –
Solid State Lighting

*Systems: Market trends*

- Turn Key **Customized SSL projects**,
- **Color dynamics** via Lighting Controls & Programming
- Enabling **architectural effects never possible before**
Shaping the future – Solid State Lighting

Systems: Solid State Lighting Projects

Glasgow Main Bridge, Scotland

Gupo Grand Bridge, Korea
Shaping the future – Solid State Lighting

Systems: Solid State Lighting Projects

Actura, Hot Water System, Östersund, Sweden
Shaping the future – Solid State Lighting

Systems: Solid State Lighting Projects

Symphony of Light HK Coliseum, SAR Hong Kong
Shaping the future – Solid State Lighting

*Systems: creating atmospheres in shops*

Winter

Spring

Summer

Autumn

Demo Philips Lighting application centre Eindhoven
Shaping the future – Solid State Lighting
Systems: Creating a Bathroom experience…

Demo in Philips Lighting Application Centre Eindhoven
Shaping the future – Solid State Lighting

*We explore new applications*

... *light in textiles, controlled by SMS messages*

IFA, Sept 2005

Activity of Incubator

IFA, Sept 2006
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  – End user driven innovation, building on technology leadership
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End-user driven innovation, technology leadership

New market themes drive additional growth

End user / Market Awareness

Yesterday

See and be seen

Today

Total cost of ownership

Safety & Comfort

Tomorrow

Lifestyle lighting

Light & health

latency awareness
emerging awareness
increasing awareness
high awareness
decreasing interest

Lighting analysts’ day, Eindhoven, September 20th, 2006
End-user driven innovation, technology leadership

*Market theme concept: Safety & Comfort*

- The same street before and after
- The street with new solution
  - Uses less energy
  - Provides higher quality light
  - Provides greater safety
End-user driven innovation, technology leadership

*Market theme concept: Safety & Comfort*

Safety at night

Comfort:
Car becomes extension of the ‘home and office’
End-user driven innovation, technology leadership

Market theme concept: Lifestyle lighting
End-user driven innovation, technology leadership

*Market theme concept: Light & Health*

- Water purification
- Infra red sauna
- UV skincare
End-user driven innovation, technology leadership

*Product-technology innovation will continue to drive growth in Lighting*

End-user driven innovation, technology leadership

*Product-technology innovation will continue to drive growth in Lighting*
End-user driven innovation, technology leadership

Organic LEDs

- Potential for large area light sources
- Consortium formed with a.o. BASF (materials) aimed to give Europe leading position
- Still in research phase
- Pre-pilot production under construction
End-user driven innovation, technology leadership

Lasers

• Develop basic laser technology
  – We acquired initial stake and obtained management control in Cedova, a start-up venture for laser manufacturing

• First volume laser application: movement-sensor
  – Result of Philips Incubator activity
  – Mouse launched with Logitech

• New applications are under development
End-user driven innovation, technology leadership
*Philips Extreme Ultra Violet for Next generation Wafersteppers*

First two EUV sources delivered to ASML
End-user driven innovation, technology leadership
Building on technology leadership:

*Development R&D% and size patent portfolio*

**Increasing R&D effort**

<table>
<thead>
<tr>
<th>Year</th>
<th>R&amp;D %</th>
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<tbody>
<tr>
<td>2002</td>
<td>3.0</td>
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<tr>
<td>2003</td>
<td>3.3</td>
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<tr>
<td>2004</td>
<td>3.8</td>
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<td>2005</td>
<td>4.4</td>
</tr>
<tr>
<td>E2006</td>
<td>5.0</td>
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</table>

**Incl. Lumileds**

**Patent portfolio increase**

<table>
<thead>
<tr>
<th>Year</th>
<th># of Patent Families</th>
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<tbody>
<tr>
<td>2000</td>
<td>1155</td>
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<tr>
<td>2001</td>
<td>1303</td>
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<tr>
<td>2002</td>
<td>1480</td>
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<tr>
<td>2003</td>
<td>1604</td>
</tr>
<tr>
<td>2004</td>
<td>1782</td>
</tr>
<tr>
<td>2005</td>
<td>2158</td>
</tr>
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</table>

*Excluding Lumileds*
End-user driven innovation, technology leadership

*Innovation drives investment for growth (2005)*

![Diagram showing the distribution of investment in R&D, Capex, Marcom, and Sales between Mature, Growth, and Emerging categories.](image-url)
Agenda

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- **Profitable growth via key business drivers**
  - End user driven innovation, building on technology leadership
  - Marketing excellence
  - Supply excellence
  - Continuous improvement, control of costs and assets

- Conclusions
Marketing excellence

Building the Brand

sense and simplicity
Marketing excellence

Market value by application segment
Marketing excellence
Focus on people acting in their surrounding

• Lighting needs are a function of human activity in a space; detailed insights are key

• We catch essentials of the solution in a Value Proposition House

• Many opportunities lie within general lighting

• We can address large, unmet end-user needs potentially earning higher margins
Marketing excellence
Flexible lighting in Shops

Shopper:
I’d like to shop in a place that catches me, surprises me, inspires me, reflects me … and my friends

Insights:

Retailer:
Our stores need to inspire and seduce. All elements should be optimized to facilitate the sale

Installer:
The system should be easy to install, easy to create the light settings and hassle free.
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Supply excellence
*Towards 0-defect quality in Automotive*

- Total car lamps supplied in 2005:
  - 425 million pieces
- 1.4 parts per million rejected at carmaker
Supply excellence

No growth without Supply excellence

e.g. secure impeccable delivery reliability Total Philips Lighting

%
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Continuous improvement

*Working Capital turns*

![Bar chart showing continuous improvement in working capital turns from 1996 to 2006 Q2.](attachment:chart.png)
Continuous improvement

*Employees are driving quality improvement*

Number of employees participating in our Quality Improvement Competition

- '97: 200
- '98: 400
- '99: 800
- '00: 1200
- '01: 1600
- '02: 2000
- '03: 2400
- '04: 2800
- '05: 3200
- '06: 3600
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Conclusion: Creating growth opportunities

- Redirection of R&D
  - Emerging countries
  - B2B
  - Energy saving
- Innovation
  - Display systems
  - LED components
  - SSL modules & systems
- Growth
  - Market driven
  - Brand perception
PHILIPS sense and simplicity
1890- : Electric Light shifted the Lighting Paradigm

This Room Is Equipped With Edison Electric Light.

Do not attempt to light with match. Simply turn key on wall by the door.

The Next wave: Solid State Lighting (LEDs) will shift it again