

PHILIPS

sense **and** simplicity

Sustainable Lighting

Energy efficiency and improved shopping ambiance with innovative lighting technologies

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Philps Lighting Russia

Retail Business Summit 9-10 Sept 2010
Hotel Radisson Royal, Moscow Russia



asimpleswitch.com

Content

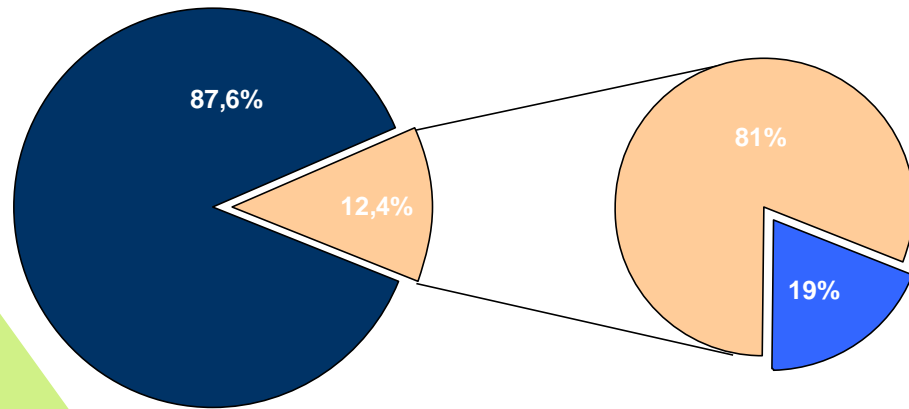
- **Lighting and Energy Efficiency**
- The challenge for retail lighting
- Philips Energy Efficiency solutions
- References
 - Discounter
 - Supermarket
 - Shopping Mall

Energy Impact of Lighting

- Lighting consumes 16% of all electricity within Russia
- Lighting consumes 19% of all electricity in the world (source IEA)

Primary Energy

Electrical Energy



Key issues

- Rising energy prices
- Global climate change
- Security of energy supply
- Economic growth

Value proposition = Energy efficient lighting

Savings of up to 80% are possible **Today**

Energy Savings Opportunity of Lighting

- Revolution in lighting technology during the past 10-15 years
- More than 95% of all lighting currently installed in the Russian Federation is based on older, less energy efficient technology (developed before 1970).
- Our current changeover rate to new lighting technologies is slow: e.g. Street lighting 3% p/a, Office lighting 7%.

Political statements Energy Efficiency

The President of Russia Dmitry Medvedev signed a decree (Dir#889) according to which energy efficiency of Russian economy have to be reduced by 40 % by 2020 year compared with 2007 year.



*Dmitry Medvedev,
President Russian
Federation*

**Savings of 245 billion RUR
in energy costs per year
with Energy Efficient Lighting**



This equates to:

- 19 million tonnes of CO₂ per year
- 247 million barrels of oil per year
- Annual output of 30 medium sized power stations @ 2TWh/yr

This is about 6-8% of total electricity consumption, which is a large contribution of the 40% target of 2020

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Understanding shoppers and retailers



Shopper

Shopping for me is so much more than just buying goods. I'd like to shop in a place where I can easily find the products I am looking for. I like to shop where I can experience the products.

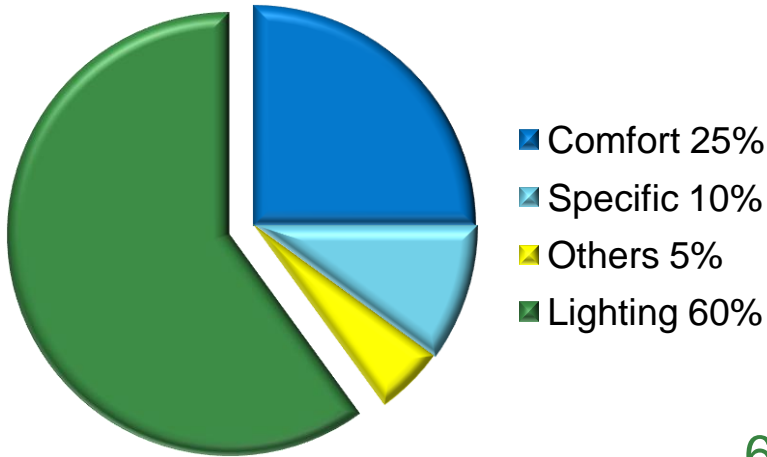


Retailer

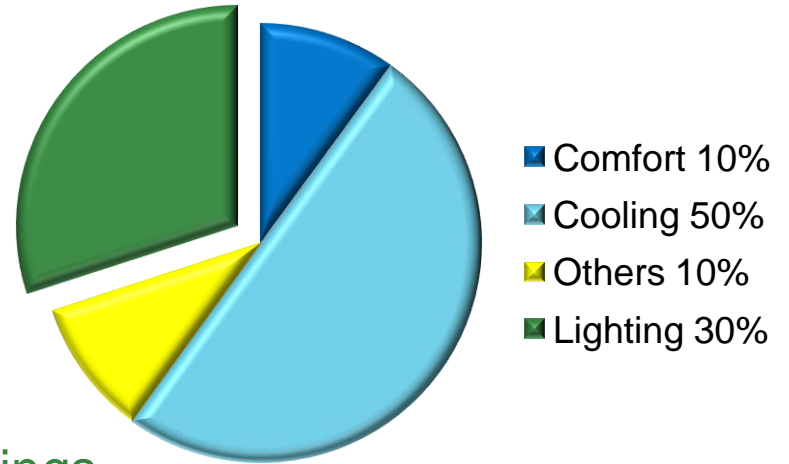
We want our stores to have more pulse, more dynamics. Different zones should have different atmospheres. Our stores need to inspire. At the same time we should optimize the cost such as energy consumption. All elements should be optimized to facilitate the sale.

Energy Challenge in Retail

Fashion



Food



67% Savings



Standard down light



Power: 51W
Lamp life : 6000 hr
Light quality: Ra 60

Energy saving down light



Power: 34W
Lamp life : 12000 hr
Light Quality: Ra 80

LED down light

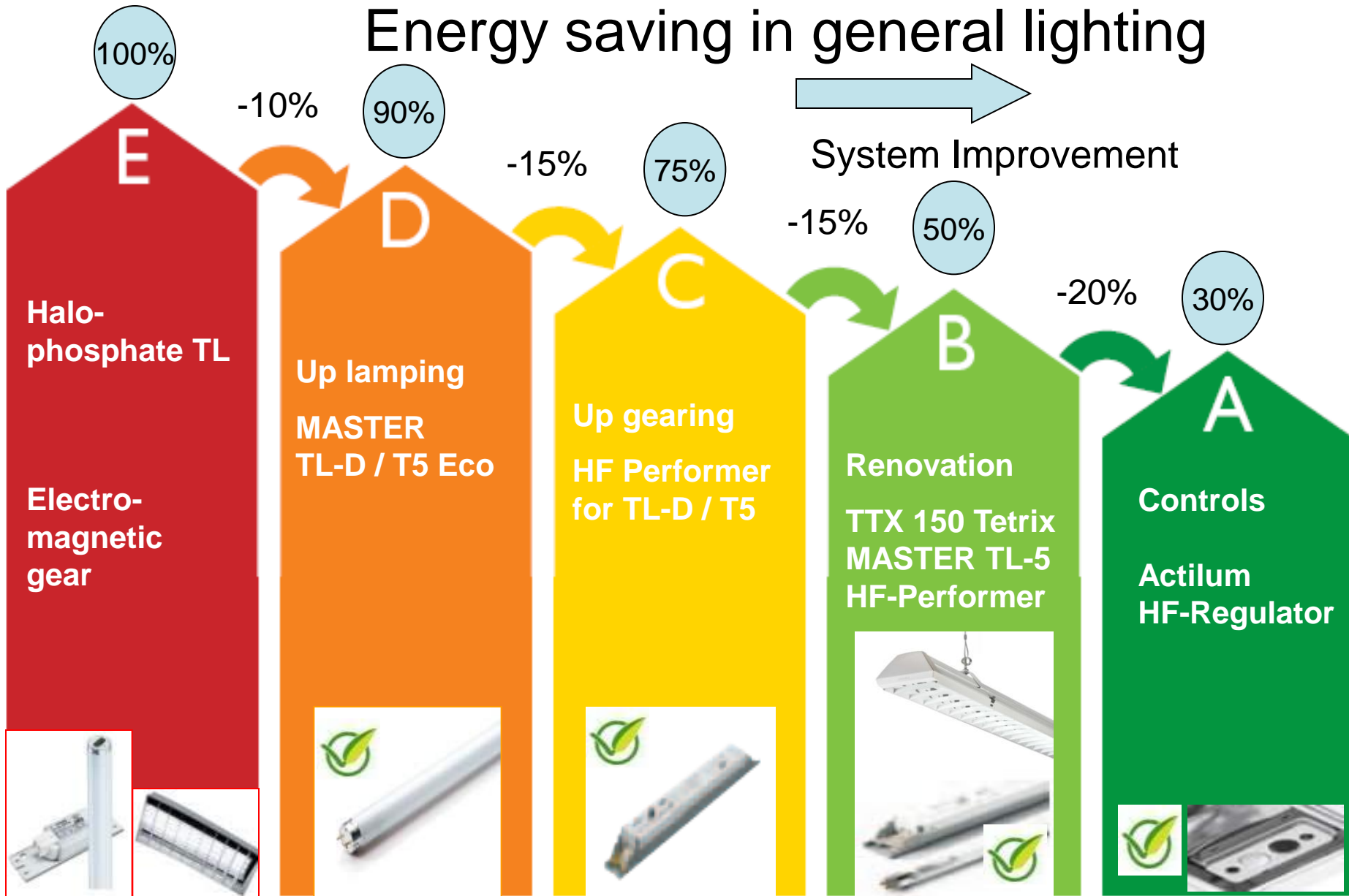


Power: 17W
Lamp life : 50000 hr
Light Quality: Ra 85⁸

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Energy saving in general lighting



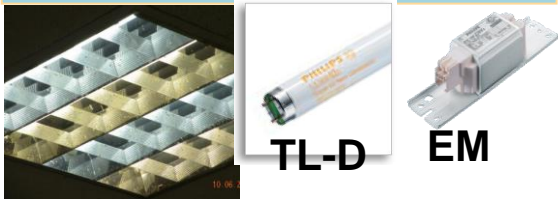
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Supermarket (light lines)

Before

Standard 4x18W TL-D/33
Power 1 pc. :**105 W**
Store: **9.85 kW**



Light level: 300-350 lux
shelves: 150- 200 lux

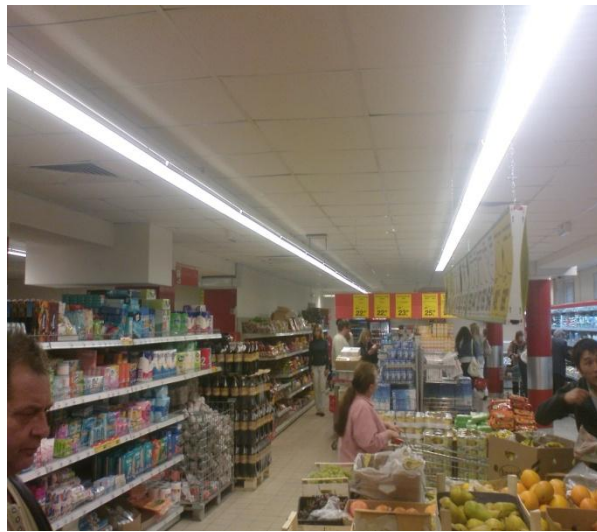
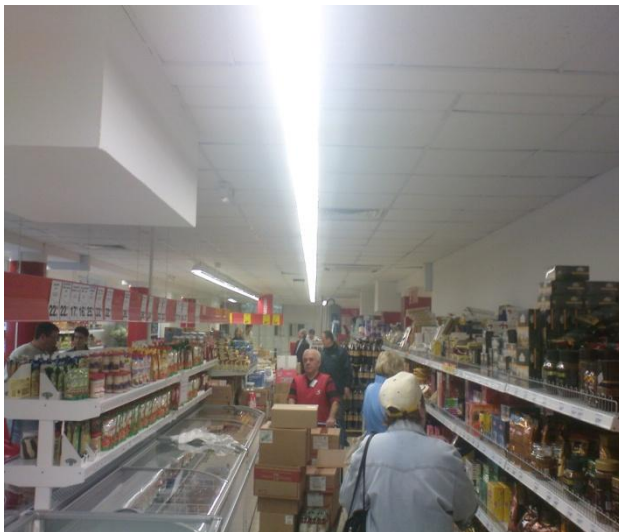
35% saving
2 times more light
Better light quality
Longer lamp life

After

TTX150 Light lines TL-D/840
Power 1 pc. :**55W**
Store: **6.38 kW**



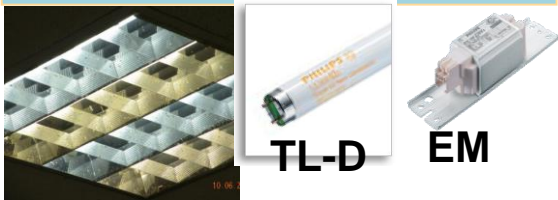
Light level: 690 lux
shelves: 500 lux



Supermarket (recessed)

Before

Standard 4x18W TL-D/33
Power 1 pc. : **105 W**
Store: **10.3 kW**

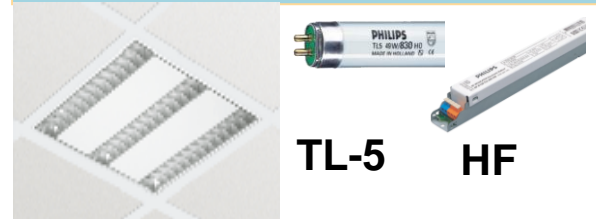


Light level: 400 lux
shelves: 200 lux

> 50% saving
25% more light
Better quality light
Long lamp life

After

TBS 165 3x14W/840 TL-5
Power 1 pc. : **45W**
Store: **5.0 kW**



Light level: 520 lux
shelves: 250 lux



Supermarket (including zones)

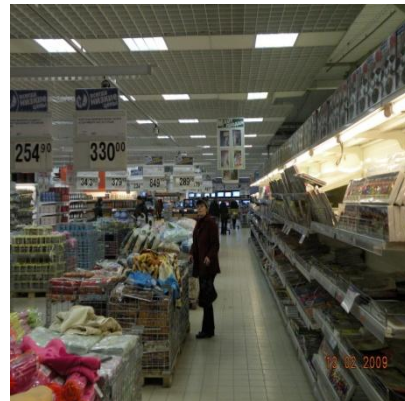
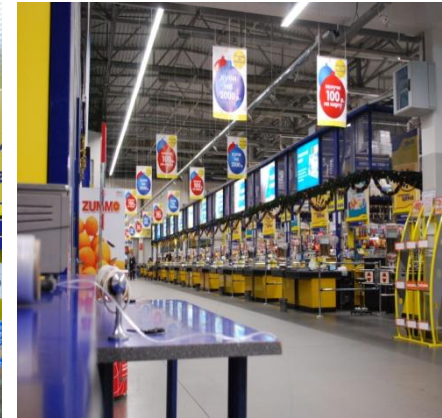
Before

Power: 34.3 W/m²
Light level: 200 lx

48% saving
2.5 times more light

After

Power: 18.0 W/m²
Light level: 500 lx



Shopping centres



Logo's

- LED Signage
- 80% Energy Saving
- 90% longer lamp life



Food Court

- MW Elite
- 45% Energy Saving
- Best quality light



Galleries

- LuxSpace LED
- 49% Energy Saving
- 90% longer lamp life



Indoor Parking

- MASTER Xtreme
- 60% Energy Saving
- 90% longer lamp life



Out door parking

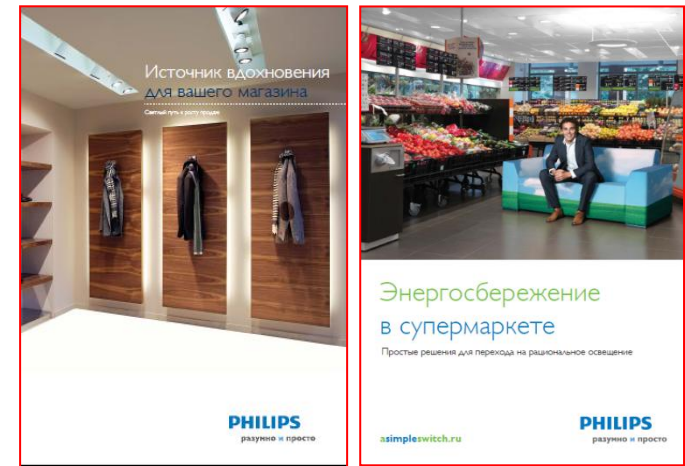
- CosmoPolis
- 55% Energy Saving
- Better quality light



Philips, your partner in sustainable lighting!

Philips can:

- Support you in finding opportunities to reduce energy consumption (**Energy Scans**)
- Help you to make a selection in leading sustainable lighting solutions that reduce environmental impacts, save cost and improve quality light (**Lighting scans and Lighting Plans**)
- See for more information



http://www.lighting.philips.ru/connect/tools_literature/brochures/app_shops.wpd

