



OFFICE ROKA

Konferencia CBRE Office roka

8.10.2025

asreco



IMMOCAP

narbutas

NESPRESSO
PROFESSIONAL



ecophon
SAINT-GOBAIN

BAVARIS
not just better. Different.
FACILITY SERVICES

HAWORTH

8-minúťovky k lepšiemu pracovnému prostrediu



**Michael
Baláš**

NARBUTAS



**Peter
Petraško**

SAINT-GOBAIN
ECOPHON



**Peter
Piš**

XAL

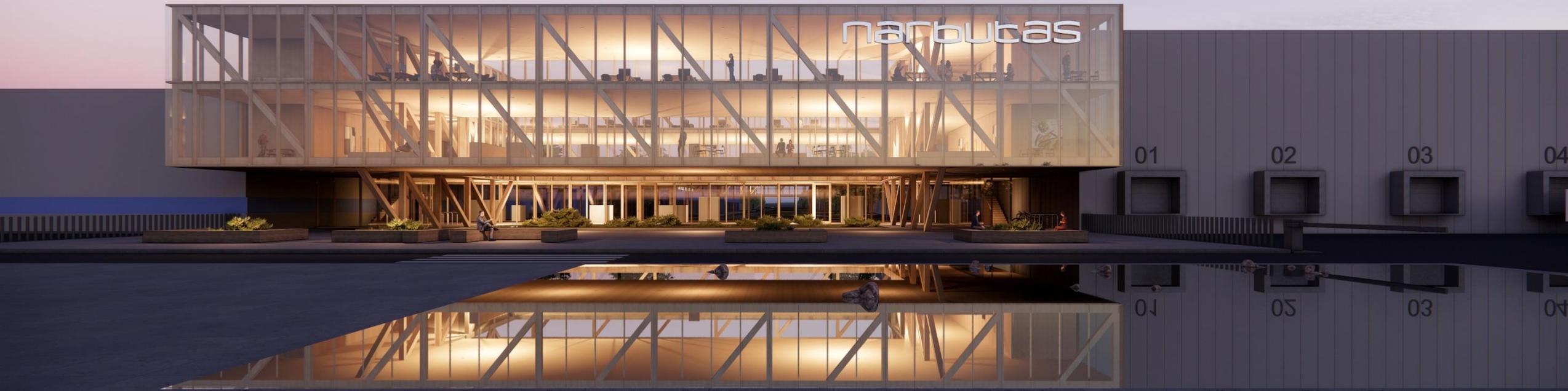


**Martin
Marko**

IMMOCAP

Viac než stolička: Ergonómia, ktorá vytvára rovnováhu

About Us



Who is NARBUTAS?

Made in Lithuania

Since

1991

68 000m²
factory

34 years of
experience

1300+
dealers

60+
markets

70+
collections

10+
showrooms

1800+
employees

Desk & Tables. Storage. Chairs.
Acoustic solutions. Lounge & Soft furniture.
Executive furniture. Reception furniture.

Vilnius. Paris. London.
Dusseldorf. Stuttgart. Munich.
Warsaw. Chicago. New York.
Washington, D.C.

NARBUTAS



More and more space is designed for lounge and relaxation.

Work Is No Longer Just Work...

...SUSTAINABILITY
MATTERS

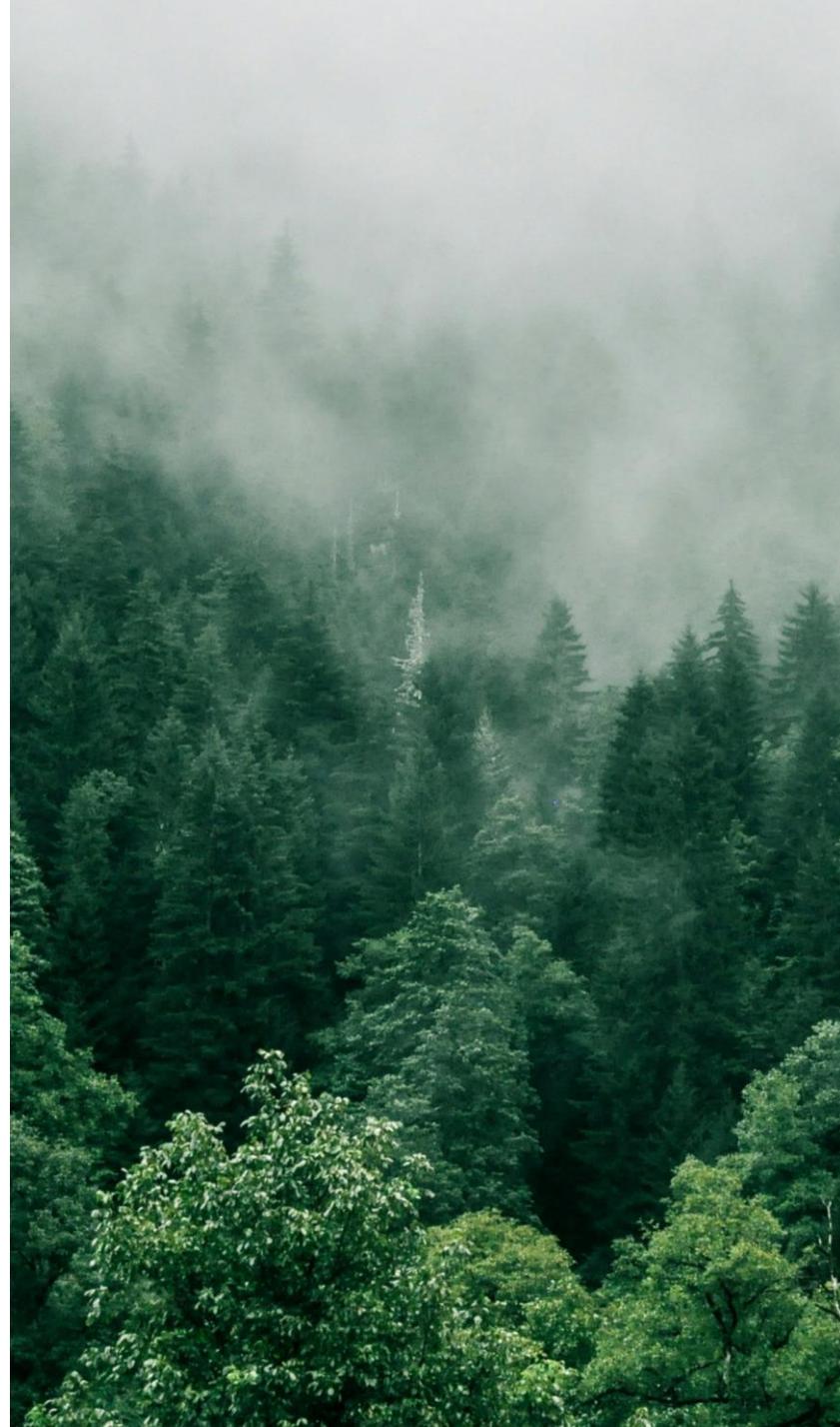
All our decisions... why we...
...which includes utilizing renewable
energy in manufacturing processes, designing
durable products using ever-increasing amounts
of recycled materials, and avoiding short-term
design trends over what truly matters.

RECREATION MATTERS

Work isn't just about work. Everyone needs rest
to regain their edge. Different people require
different ways to achieve this, but there's no need
to compromise. Let us help you build intuitive and
flexible lounge spaces for both individual retreat
and communal bonding.

Have a seat
and recharge.





Focus and Recreation

- Hybrid work model
- New generations in the workforce
- Hygge philosophy
- Human-centric approach
- The new trend – rest and recreation in the workplace







Let's get in touch!

Michael Baláš

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Connect with us



Work with us



A modern office interior featuring a ceiling with horizontal wood slats and recessed linear lighting. A curved white reception desk is in the center, with a 'Deloitte' logo on the wood-paneled wall behind it. Large windows with blue curtains are visible in the background.

**Akustika ako
neviditeľný
motor
produktivity
v kanceláriách**

Peter Petraško
Concept Developer
Ecophon

Čo si objednáš vs. Čo dostaneš



OFFICE NA VIZUALIZÁCII

≠

FUNKČNÁ REALITA

Slúchadloví samotári namiesto spolupráce

60%

Neschopnosť
sústrediť sa

Kancelárski pracovníci sa
nedokážu sústrediť
v hlučnom prostredí

/Oscar Acoustics Survey, WorkInMind, 2022/

70%

Narušený výkon

Zamestnanci sa sťažujú,
že hluk v kancelárii
ovplyvňuje kvalitu ich
práce

/Haworth – Decrease Office Noise to Increase Productivity, 2024/

66%

Strata produktivity

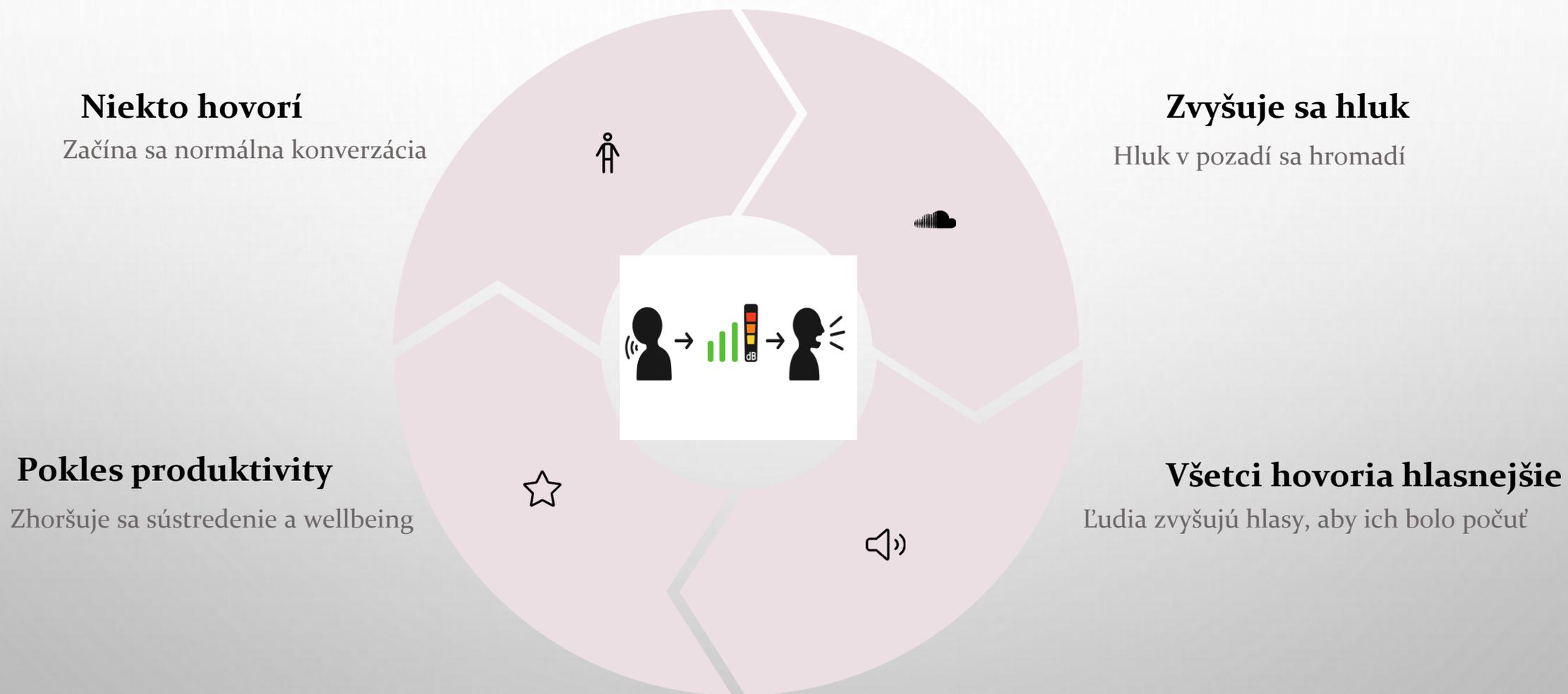
Maximálny pokles pri
počúvaní konverzácií z
okolia

/Venetjoki, Kaarlela-Tuomaala, Keskinen & Hongisto /2006/

*Spoločnosti míňajú desaťtisíce na to, aby prilákali ľudí späť do kancelárií z
homeofficov, ale prichádzajú o oveľa viac peňazí, keď títo zamestnanci v
skutočnosti nemôžu efektívne pracovať kvôli hluku*



Lombardov efekt: Začarovaný kruh



+15 dB zvýšenie hluku = +30% stresových hormónov (adrenalin a kortizol)

Priestor na Instagram vs. Priestor na Prácu



Vyzerá super

Ideálne pre sociálne siete, nie veľmi dobré pre produktivitu

Nefunkčné priestory sú drahé chyby

Funkčný priestor = spolupráca + zameranie = viac peňazí pre firmu



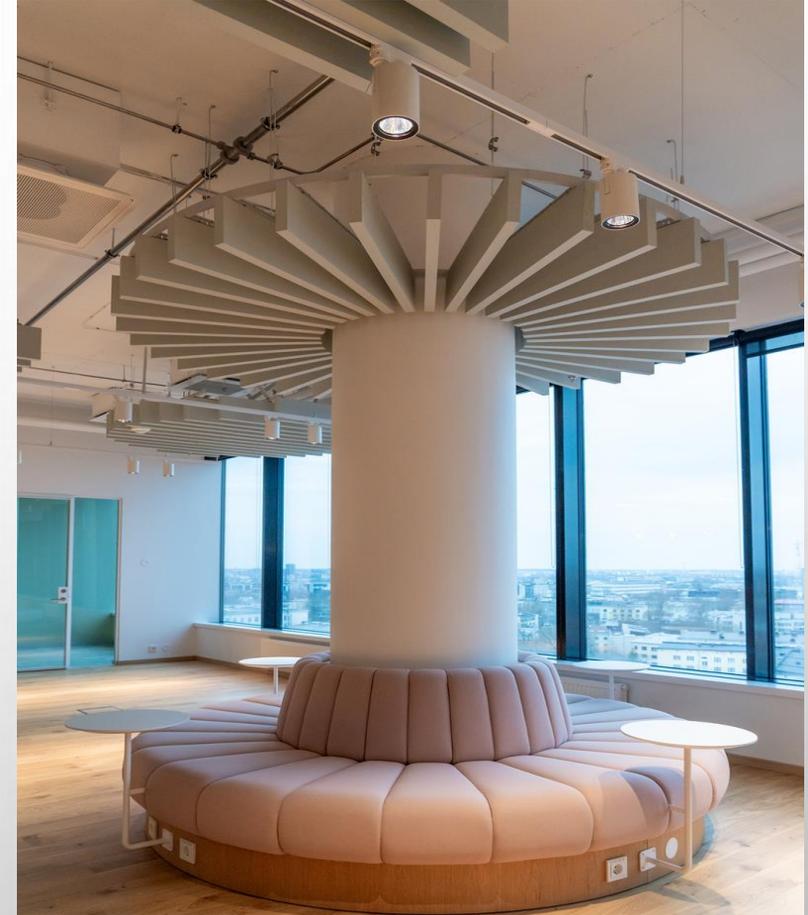
Vyzerá super a Funguje super

Navrhnuté pre ľudský výkon a pohodu

Krásny dizajn ≠ pohodlie

Architekti by mali navrhovať pre ľudí, nie pre portfóliá

Krása a funkčnosť ruka v ruke



Moderné akustické riešenia sa hladko spájajú so sofistikovaným dizajnom – jemným, čistým a vysoko účinným pri absorpcii hluku
Akustická investícia nie je o kompromisoch v estetike; ide o dosiahnutie vizuálnej príťažlivosti a funkčnej dokonalosti

VÝDAVKY ? NIE... INVESTÍCIA...!

Akustické riešenia sa vyplácajú

Investícia

10 000 – 15 000 € na 300 m² kancelárskej akustickej úpravy

Zvýšenie produktivity

3-5% zlepšenie efektivity zamestnancov

Doba návratnosti

12-18 mesiacov, /často menej ako jeden rok/

Pre kanceláriu s 30 zamestnancami a mesačnými mzdovými nákladmi 1 500 EUR na osobu prináša každý 1% nárast efektivity ročnú hodnotu 5 400 EUR.

Matematika nepustí © čísla hovoria jasne



Náklady na zlú akustiku



Denné straty

Každý deň v akusticky „chudobnom“ prostredí, znamená zbytočná strata produktivity a pohody zamestnancov



Skryté náklady

Vyššia fluktuácia, vyšší počet sickdays, znížená výkonnosť



Inteligentné investovanie

Riešenie akustiky od začiatku projektu šetrí dlhodobé prevádzkové náklady



Investície, nie výdavky



Keď je akustika komunikovaná od začiatku, investori vedia, že šetria na nákladoch na obrat, znižujú počet dní práceneschopnosti a zvyšujú produktivitu v nasledujúcich rokoch

Spoločnosti, ktoré to urobili správne



Deloitte Slovensko, Bratislava



365 Bank a.s., Bratislava



EOS KSI Slovensko, s.r.o., Bratislava

Dizajn by nemal byť len

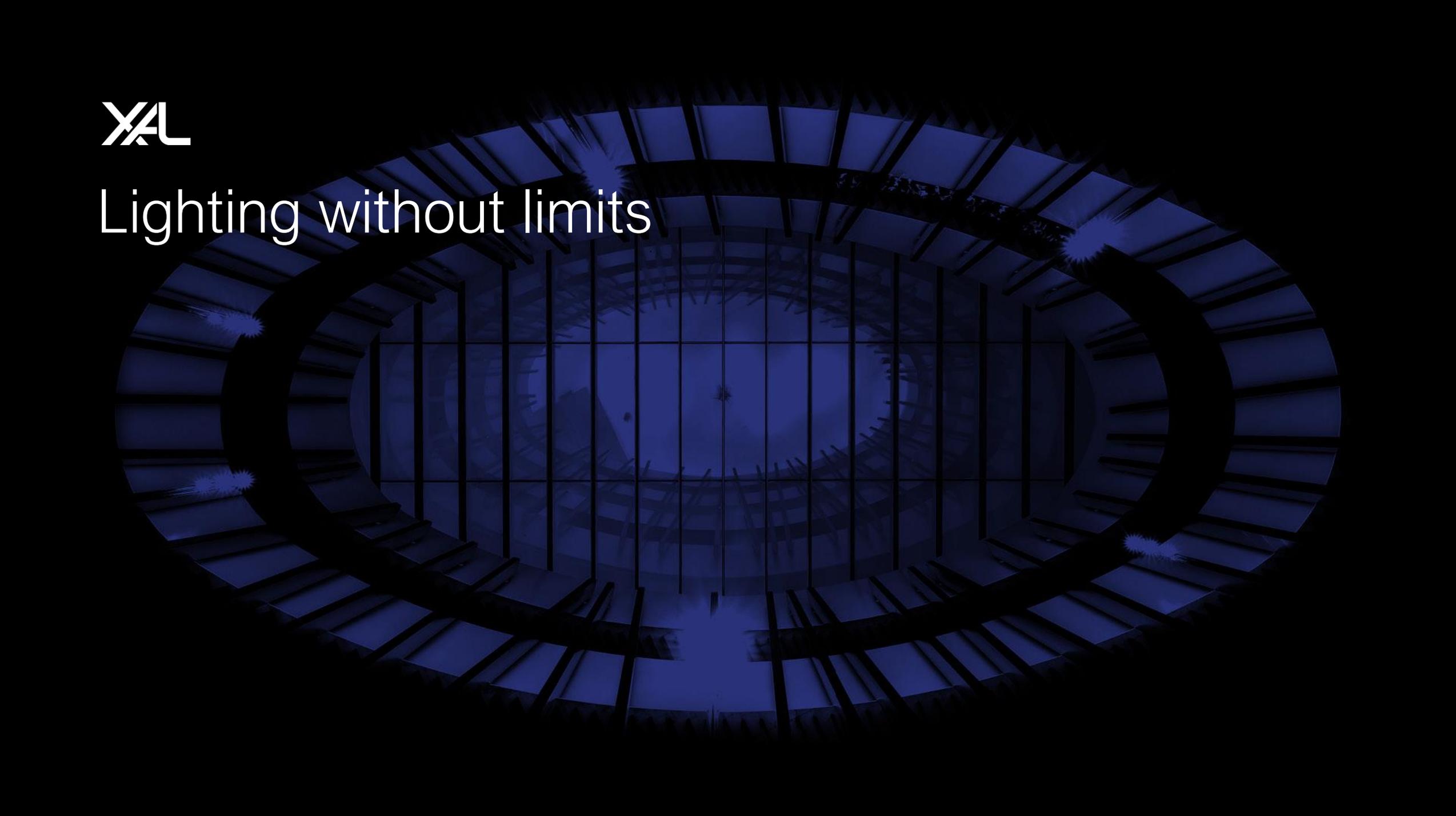
o tom, čo **vidíte**...

ale aj ako sa **cítite**...

každý deň...

Peter Petraško
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XAL

Lighting without limits

Osvetlenie, ktoré šetrí energiu aj ľudský potenciál

Agenda

- Story behind the Light
- Human Centric Lighting
- Economy of proper illumination

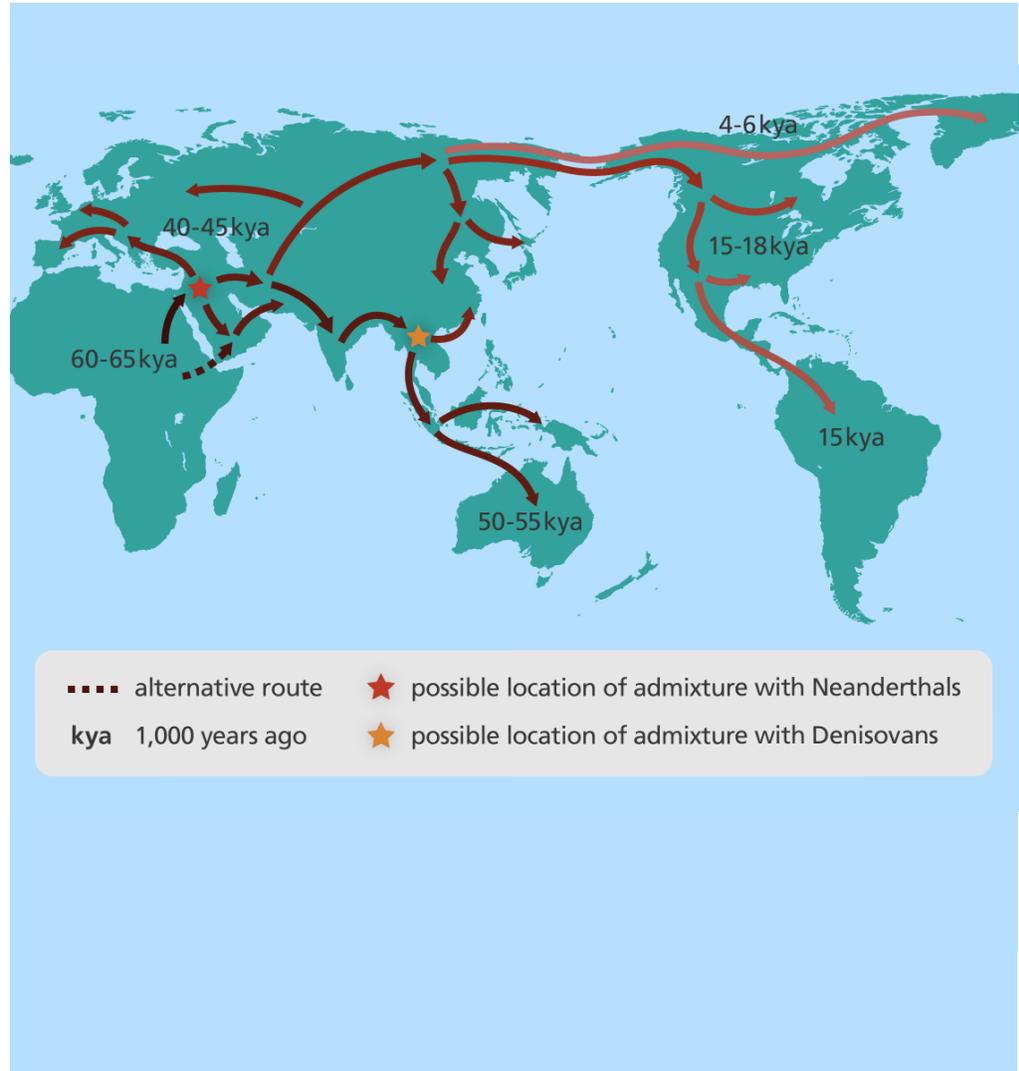
Bc. Peter Píš, MBA

Story behind the light





The beginning of humans was in East Africa.



However in Europe, we are only last 130K years.



No life without light

- The human eyes are developed for the African light intensity and brightness.
- In Europe, in winter, there is not enough light for our well-being.
- We have the same eyes as our forefathers – we have the same light needs.



SAD - Seasonal Affective Disorder

- 60% of the middle-Europeans are affected by SAD.
- WINTER DEPRESSION is caused by lack of light.

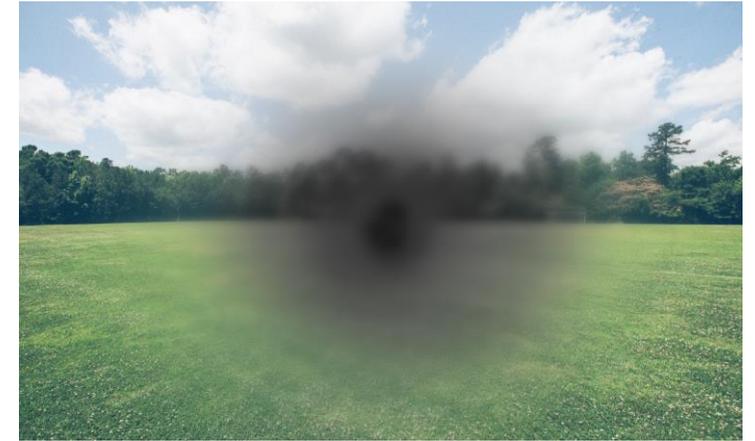
Too much light



Dazzling



Light torture

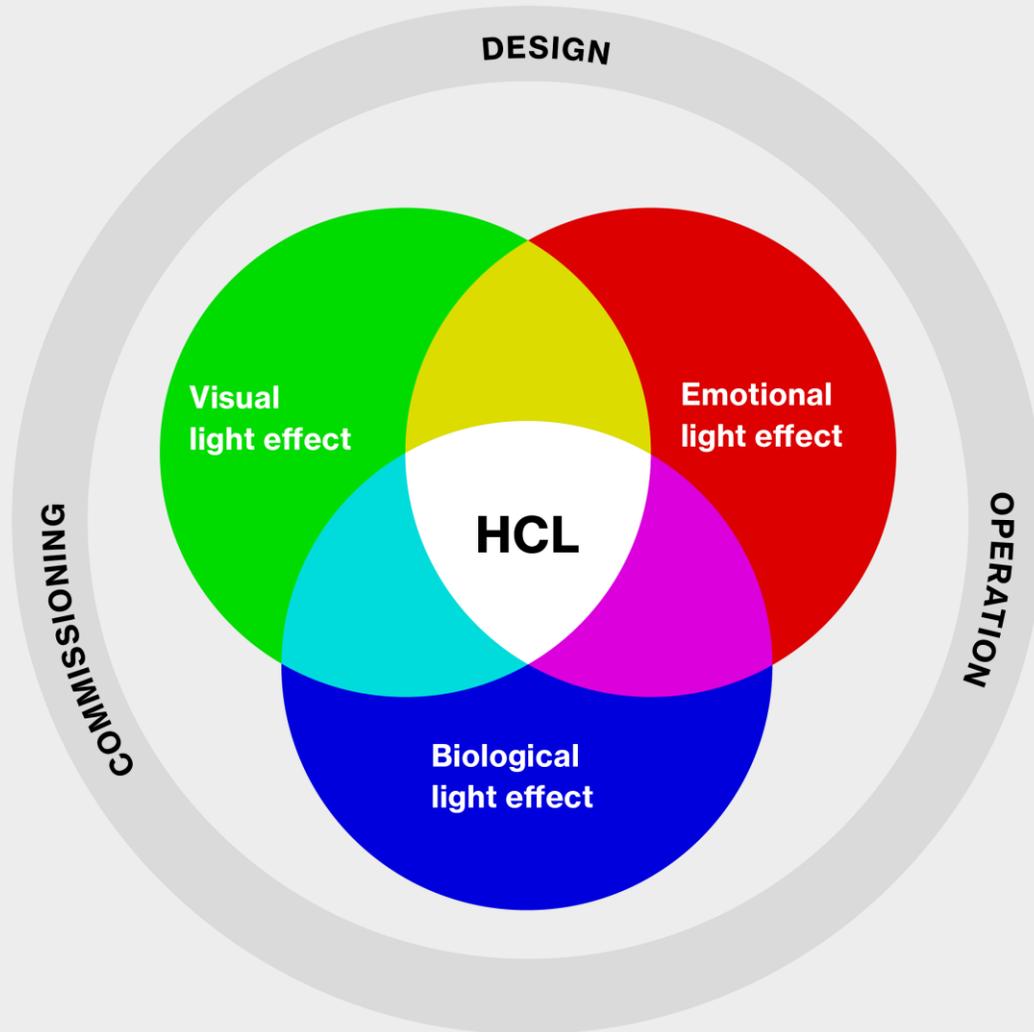


Macular degeneration

Human Centric Lighting



Human Centric Lighting



- **Visual light effect**
 - Standards e.g., DIN EN 12464-1
- **Biological light effect**
 - Circadian rhythm, productivity, attention, alertness, better sleep
- **Emotional light effect**
 - Architectural aesthetic, perception, psychology aspects, users expectation

Visual light effect

XAL
TASK 1200 suspended DIRECT /
INDIRECT POWER

059-2224017Z

GENERAL

Ceiling _____
Suspended _____
white _____
IP20 _____
indirect 2140 lm _____
direct 3290 lm _____
total 5430 lm _____
RAL9010* _____

LED

3000 K _____
CRI ≥ 90 _____
L80 / 50000 h _____
photobio. safety RG 0 - no Risk _____
invol ≤ 3 MacAdam _____

OPTICAL

Microprismatic _____
UGR < 16 _____
≥ 65° < 3000 cd/m² _____

PHYSICAL

Cable 1500 mm _____
length 1220 mm _____
width 320 mm _____
height 32 mm _____
9 kg _____

ELECTRICAL

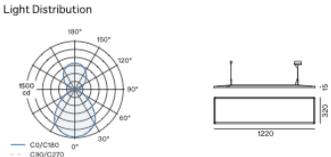
non-DIM _____
51 W _____
106 lm/W _____
PCI 220-240V _____

*RAL Pyrite colors may deviate slightly due to production conditions.

PROJECT _____
TYPE _____
NOTES _____
QUANTITY _____
DATE _____



Rectangular luminaire housing with rounded edges in aluminium; extremely flat design (only 15mm); modern shape in elegant design for discerning requirements; surface white powder coated; suspended luminaire with 1500mm cable suspension; with integrated tool-less suspension height adjustment; incl. transparent fender; direct light distribution through LGP body (Light Guiding Prism); side coupled light directed downwards by laser engraving; light control via highly reflective reflector material; indirect component with special PCBs for increased luminous flux and maximum ceiling illumination; microprismatic PMMA cover; completely homogeneous illumination; same light density for all surface lights with the same components; UGR ≤ 16; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above 65° ≤ 3000 cd/m²; light colour 3000 K; Beamng initial = 3 MacAdam; CRI ≥ 90; min. 80% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; canopy with 2 cable openings and plug-in terminal for through wiring; degree of protection IP20; PCI 220-240V; photobiological safety according to IEC 62471 risk group RG 0 - no Risk; internal wiring in light halogen free; incl. converter, non dimmable; sound absorbing accessories available.

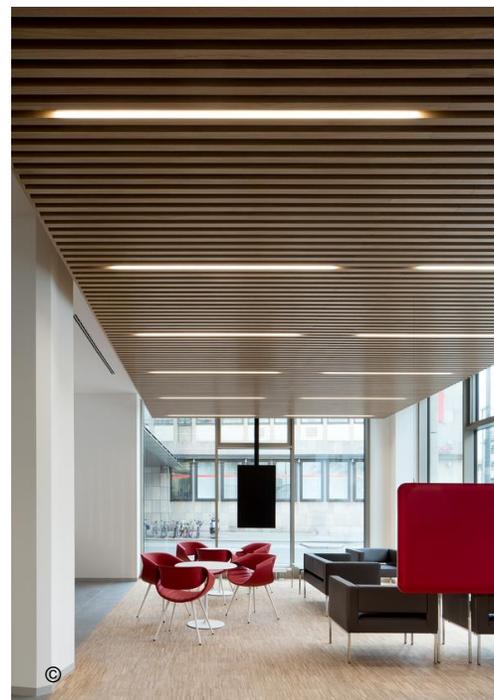


Light Distribution

— C0/C80
- - - C90/C270

059-2224017Z-001 The technical data represent rated values for an ambient temperature of 20°C. The data values for the luminous flux are initially subject to a tolerance of ± 10%, those for the electrical connected load are initially subject to a tolerance of ± 10%, and those for the colour temperature are initially subject to a tolerance of ± 150 K. No liability is assumed for typographical or printing errors. The general terms and conditions of XAL GmbH apply.
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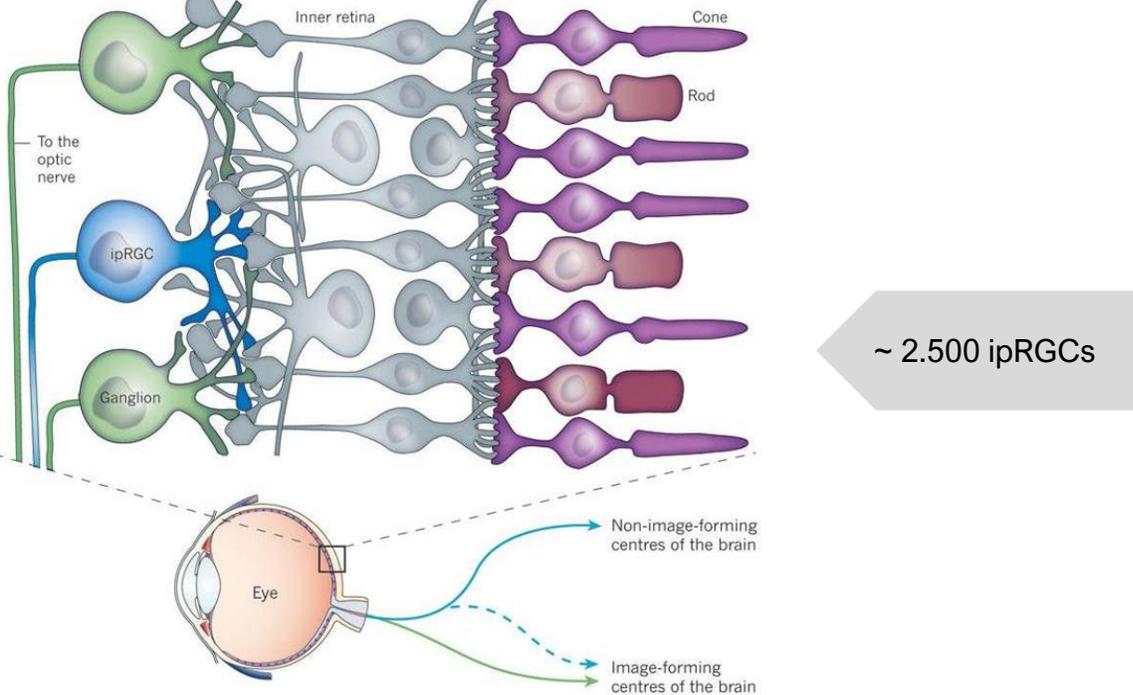
- Lighting environment
- Luminance distribution
- Degree of surface reflections
- Illuminance scale
- Visual task area
- Direct environment
- Background area
- Uniformity of illuminance
- Illuminance level measurement grid
- Physiological glare (shielding)
- Psychological glare
- Reflected glare
- Cylindrical illuminance
- Modelling
- Directional lighting
- Light colour
- Colour rendering
- Flickering and stroboscopic effects
- Illumination of computer workstations
- Maintenance factor
- Energy efficiency requirements
- Daylight
- Variability of light



Emotional light effect

Projects

- XAL Office
- Amazon Office



Biological light effect

Intrinsically photosensitive retinal ganglion cells

discovered in 2001



Nerve cells containing melanopsin are shown in blue in the spread out retina. Dr. Samer Hattar

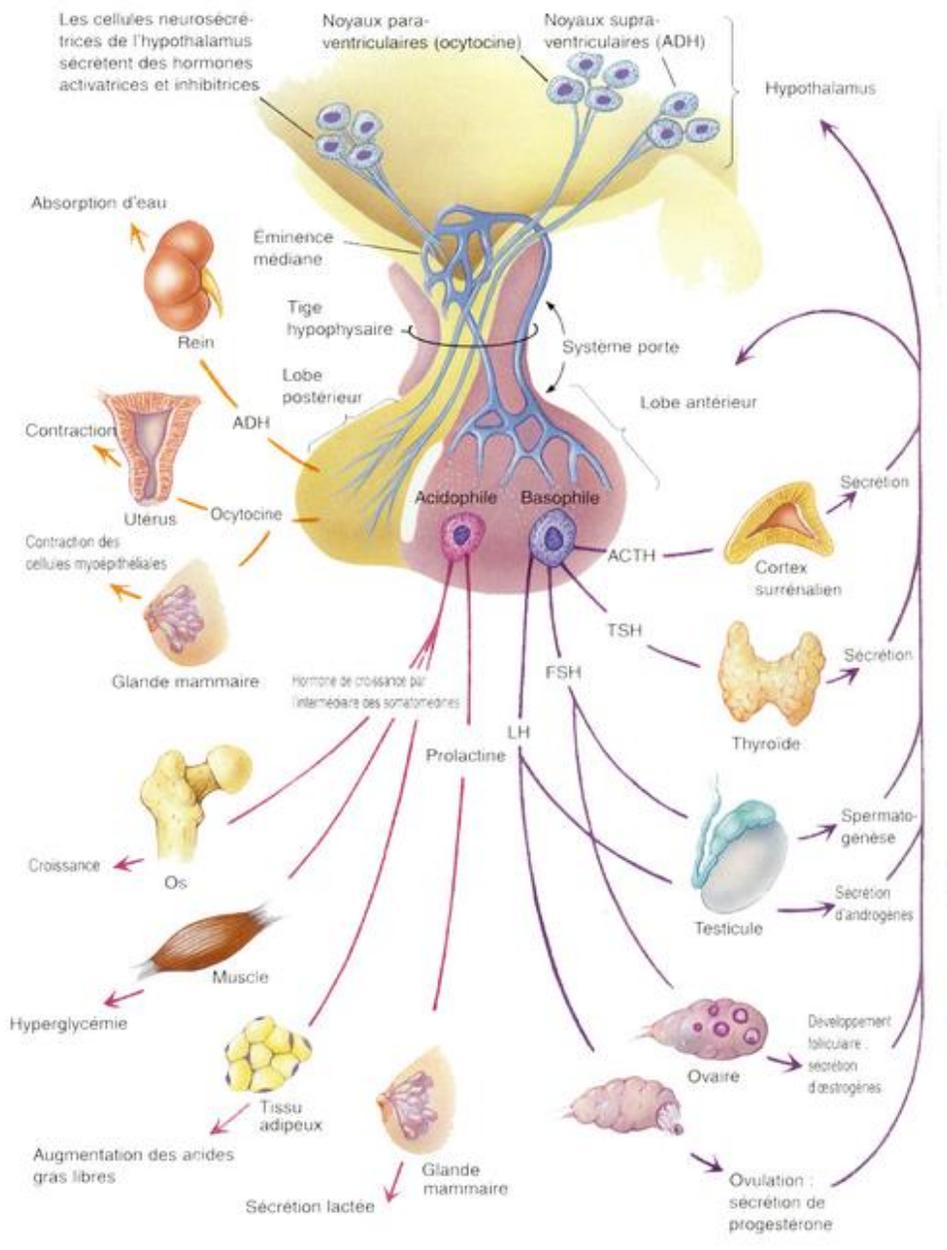
Intrinsically photosensitive retinal ganglion cells
„controls the inner clock of man“



Hypothalamus

The „master clock“

- Main regulation center
- For all vegetative and endocrine processes.
- It controls circulation, body temperature, sexual behavior, fluid and food intake
- supreme control center of the human endocrine system
- responsible for the circadian rhythm
- suprachiasmatic nucleus (SCN) = master clock



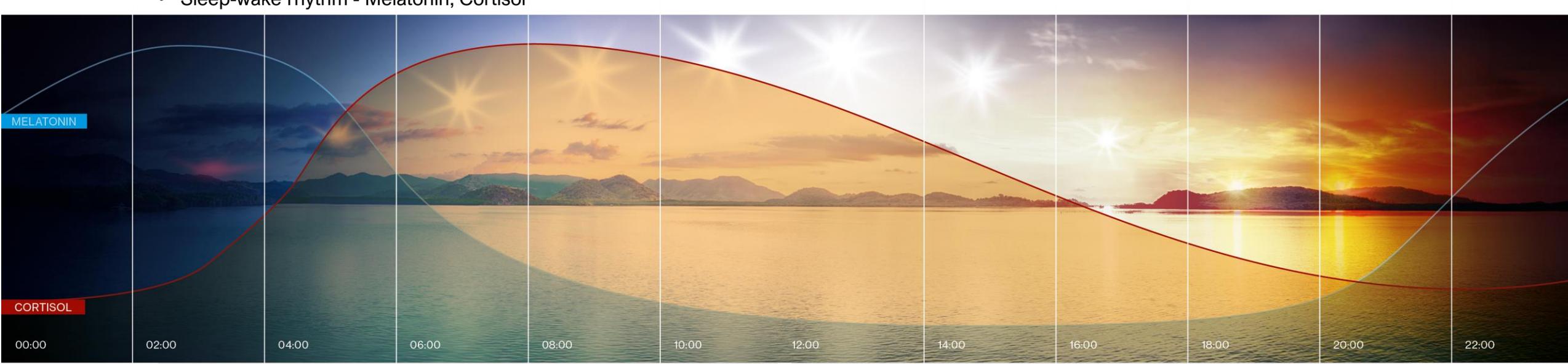
Hypophysis

Releases the hormones

Biological light effect

Light controls the human (as much as human controls the light)

- Creation of vitamin D3
- Hormon distribution
- Sleep-wake rhythm - Melatonin, Cortisol
- Motivation, impetus, luck – Serotonin
- Sexual activity „Spring feelings “



Economy of proper illumination





Increased Productivity What studies say?

Up to 23% improvement in employee performance with optimized lighting (source: Lighting Design Lab).

Cooler light (4,000K–6,500K) enhances alertness, focus, and cognitive function.

Human-centric lighting supports circadian rhythms, reducing fatigue and boosting engagement.

Reduced Absenteeism

Better lighting conditions linked to fewer sick days and improved mental well-being.

WELL Building Standard studies show lighting upgrades contribute to lower stress and burnout.





© Kurt Kuball

Energy Efficiency & Cost Savings

LED lighting can reduce energy consumption by 50–70% compared to traditional systems.

U.S. DOE estimates \$1.64 per sq. ft. in annual productivity gains from lighting improvements.

Lower maintenance costs due to longer lifespan of LEDs and smart lighting systems.

Improved Employee Satisfaction

68% of employees report dissatisfaction with current lighting (ASID study).

Personalized lighting controls increase comfort and morale, leading to higher retention.



© Kurt Kuball

Return on Investment (ROI)

Even a 1% productivity increase can offset lighting upgrade costs.

WELL and LEED-certified lighting designs show positive ROI within 2–3 years.

Cornell University Study: Workers near windows had 2% higher productivity

Human-Centric Lighting (HCL): Can increase productivity by up to 13%

Poor lighting contributes to eye strain, headaches, and fatigue, reducing output

Variables		Unit
Office Size	400	Sqm
Construction cost per sqm	650	Euro/sqm
Number of employees	50	Employees
Avarage salary	2,000	Euro/month
Expected produced value	2,500	Euro/month
Cheapest solution, supply/install	30	Euro/sqm
Best possible solution, supply/install	200	Euro/sqm
Expected productivity increase from perfect lighting (interior atributes)	3	%
Basis for decision		Unit
Total construction cost	260,000	Euro
Total pay roll	100,000	Euro/month
Total produced value	125,000	
Difference in ceiling cost Best/Cheapest solution	68,000	Euro
Effect of productivity increase	3,750	Euro/month
Pay Back Period	18	Months

Follow the light



Bc. Peter Píš, MBA

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Kancelárie, ktoré myslia dopredu: ESG ako nový štandard výstavby

INNOVATION





Náš prístup k udržateľnosti

Každá z našich budov má energetickú koncepciu založenú na eliminácii energetických strát v kombinácii s technológiami, ktoré využívajú sálavé a obnoviteľné zdroje.

Naši stavební fyzici integrujú rôzne technológie na dosiahnutie energetickej účinnosti pre každý projekt. Každá budova má svoj vlastný energetický koncept. Prvky, či kombinácia technológií sa môže líšiť, no výsledkom je vždy špičkový energetický manažment.

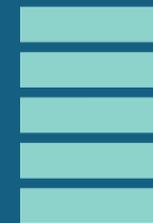
Obnoviteľné zdroje



Energetická efektivita



Energetický manažment





Štvorkombináciou tepelnej aktivácie TABS, externého tienenia, fotovoltiky na streche a tepelného čerpadla máme až o 50 % nižšie náklady na energie.

Letný deň:

átrium
 26-28 °C

kancelárie
 21-23 °C

