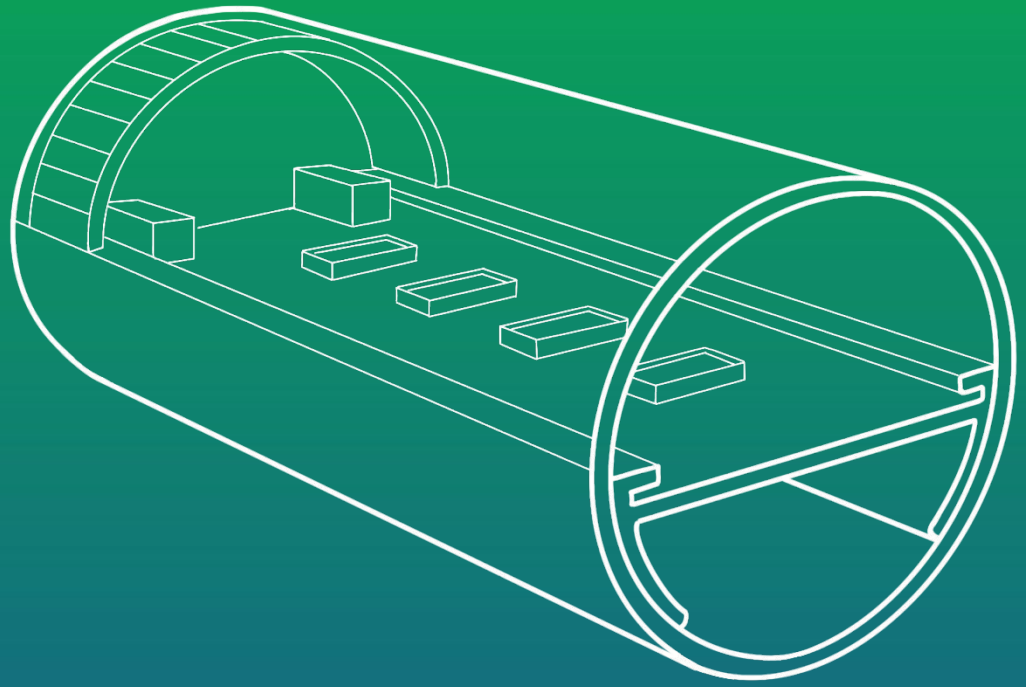


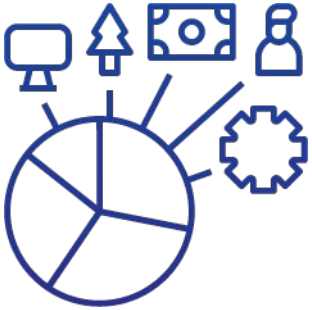
AZ Light

NEXT GENERATION OF LED LIGHTS

Global trends and needs

Ecological

- *carbon footprint cut*
- *fighting global warming*
- *recyclable at zero waste production*
- *saving energy, reducing heat load on HVAC*



Economical

- *energy consumption reduction — up to 50% compared to old LED's*
- *life environment improvement*
- *new jobs creation — up to 20,000*
- *government expenses reduction*

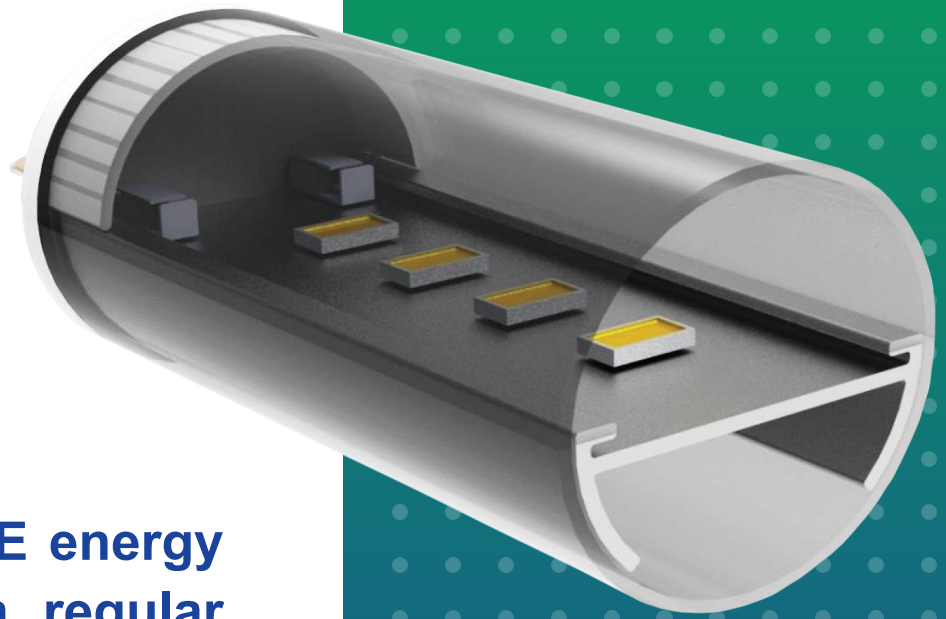
Technological

- *local or country own manufacturing*
- *efficient, green, high quality products*
- *current or old infrastructure use*
- *cost and price effective technologies*

Solution? Yes - **LS Core™ technology**

What is LS Core™?

Innovative & eco-friendly LED solution for any type of lights' applications



- **eco-friendly**
- **breakthrough**
- **energy & cost efficient**

- **2 times MORE energy efficient than regular LED technology**
- **3 times LONGER life span than regular LED technology**

Traditional LED technology

Was considered to be the most innovative solution 20 years ago

- *high (100 — 120 LmW) efficiency*
- *mechanical stability*
- *most safety*
- *easy to recycle*
- *semi long (50,000 hours) operational life*

Still it has serious drawbacks

- *PCB (printed circuit board) and heat sink required*
- *long and expensive production due to PCB (printed circuit board)*
- *small maintenance required*
- *LED's high heat generation — fast degradation due to it*

We offer LS Core™ as the most innovative technology, that takes LED solutions to the NEWEST and HIGHEST LEVEL

LED LS Core™ is *INNOVATIVE*

200.19 lm/w MOST efficient LED Lights

with proven results by independent, 3rd party «USA Lighting Laboratory», California

Without printed circuit board, heat sink

No etching, No washing, No ovens, No drying,

117,000 hours — longer life span

up to 45 years

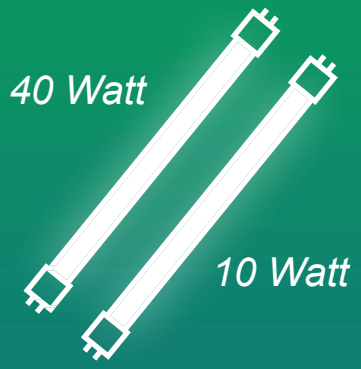
Fast production circle & low cost

Low heat generation
No heat sink required

<u>Not dependent of Chinese</u>

equipment, parts, components supply

LED LS Core™ is *PROFITABLE*

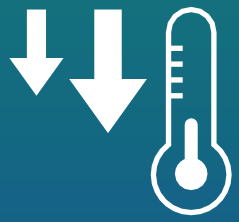


8,5 – 10 Watt LS Core™ T8 tube produces MORE light than 32 Watt, plus ballast 8 Watt, fluorescent T8 tube

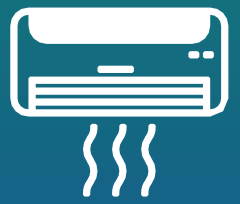
€350 Mln savings annually

30 Mln LS Core™ tubes produced & installed = 1 Bln Watt *(1,000,000,000 = 1 Giga)* **Watt saved**

X10 TIMES LESS heat than fluorescent tube



EXTRA energy savings on air conditioning



LED LS Core™ is *GREEN*

Does NOT require acids, paints, solvents — due to NO use of PCB *(printed circuit board)*

99.9% recyclable

Zero waste to landfill

20,000,000 tubes installed can annually save

1,75 Mln tons of CO^2

0,25 Mln tons of Sulphur dioxide to reduce ecological harmful footprint

Green sustainable alternative to nuclear energy

400+ nuclear power blocks and stations globally

- *nuclear fuel is dangerous*
- *non-ecologically friendly*
- *nuclear waste is really difficult to recycle or store*

Nuclear stations produce a LOT of heat, that is a pure heat waste and increase global warming

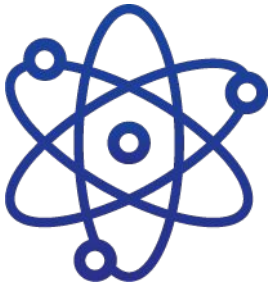
LS Core™ technology is a great replacement for it

30 Mln LS Core™ T8 tubes being put in operation **will save 1,000,000,000 Watt of energy** (1 Giga Watt or 1,000 Mega Watt) ANNUALLY

Nuclear power station produces at max load the same amount of energy — 1 Giga Watt

LS Core™ T8 tube plant making 30 Mln tubes ANNUALLY — can replace 1 block of nuclear power station EVERY year

LS Core™ — economically and ecologically attractive solution



1 block of nuclear power station building takes

- ***8 — 10 years***
- ***€6,5 — 10,0 Bln***
- *problems with nuclear fuel, delivery, nuclear waste after fuel being exhausted*

30 Mln of LS Core™ T8 tubes production takes

- ***1 time — 1 year for plant to be built - €0,15 Bln***
- ***ANNUALLY this plant will produce 30 Mln LS Core™ T8 tubes***

Cost of 30 Mln LS Core™ tubes — €0,45 Bln

Installation of 30 Mln tubes — €0,15 Bln

Total cost is €0,75 Bln compared to €6,5 — 10,0 Bln for power station

Green sustainable alternative to nuclear energy

Ecological issue

Fluorescent T8 tubes are going to a landfill WITHOUT any recycling

1 fluorescent tube wastes and contaminates 10 — 15 m^3 of soil and 50 — 100 m^3 of water

Zero waste & saving the resources

Fluorescent tubes after replacement by LS Core™ tubes will be collected & sent to special plant

30 Mln LS Core™ tubes will save:

- ***2,2 Mln tons of CO^2 emission annually***
- ***over 650 Megawatt of waste heat produced (compared to nuclear power station heat emission)***

Opportunities

20,000 new sustainable jobs creation for retrofit and installation new T8 tubes, disposal old T8

Not much land required or any old plants can be reused

LS Core™ — energy saving solution

Perfect eco-friendly & inexpensive alternative or addition to wind, solar power co-generation systems

- *greatly reduces a load on fossil fuel based traditional energy generation systems*
- *reliable & independent from weather conditions & seasons*
- *ideal for small energy grids (less than 2,5 MW)*
- *long lifetime — 45+ years*
- *no new powerlines required — existing infrastructure can be used*
- *reduces an electrical load on grid & extends it's life*

Economically effective solution:

Cost of 1,0 MW wind turbine is €2,0 Mln

€2,0 Mln being spent for LS Core™ T8 tubes (100,000 pcs) can provide sustainable 2,4 MW of energy SAVINGS annually

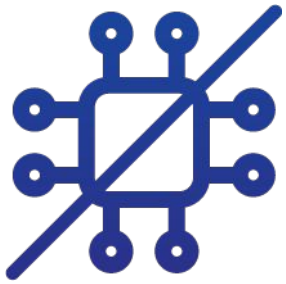
Key technological data

Verified life span -

117,000 hours

45+ YEARS at 10,5 hours a day

Cost savings — virtually no maintenance



NO printed circuit board (PCB)

Reduced LED lights failure

LESS replacements

LESS labor expenses

Saves fossil fuel

due to less energy consumption

Saves life of big electric grids

due to less energy load & less heat

Reduces production cost

due to eliminating whole PCBs production eliminating heat sink manufacture

Reduces demand on pick hours

reduced power production reserve

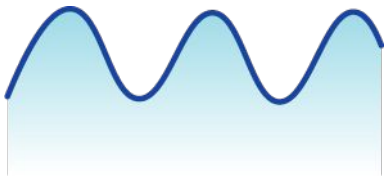
Health benefits

LS Core™ tubes' light is close to sun light spectrum

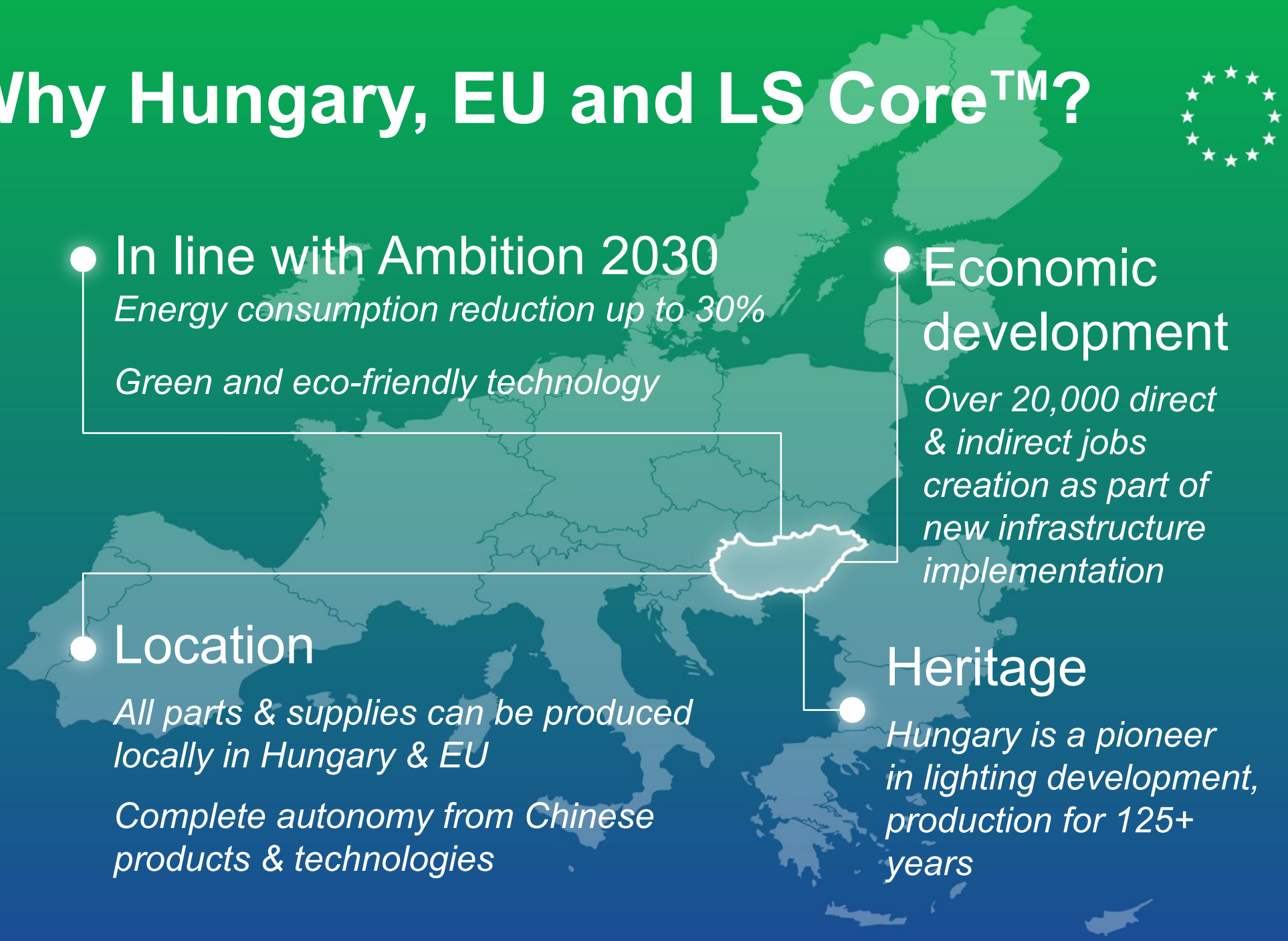
Free from UV & infrared radiation

LS Core™ based lights have LOW flicker — LESS than 5% *(compliant with latest European Union health directories)*

Reduces exhaust of pollution to air due to less power usage

Conventional LED T8 tube by large company	AZ Light NEXT GENERATION OF LED LIGHTS	SUN
Flicker 42%	Flicker 0,7%	Flicker 0%
		
Findex 0.131	Findex 0.002	Findex 0.000
F persent (%) 042.7	F persent (%) 000.7	F persent (%) 000.0
SVM 1.502	SVM 0.021	SVM 0.000
Freq (Hz) 120	Freq (Hz) 120	Freq (Hz) 0

Why Hungary, EU and LS Core™?



In line with Ambition 2030

Energy consumption reduction up to 30%

Green and eco-friendly technology

Economic development

Over 20,000 direct & indirect jobs creation as part of new infrastructure implementation

Location

All parts & supplies can be produced locally in Hungary & EU

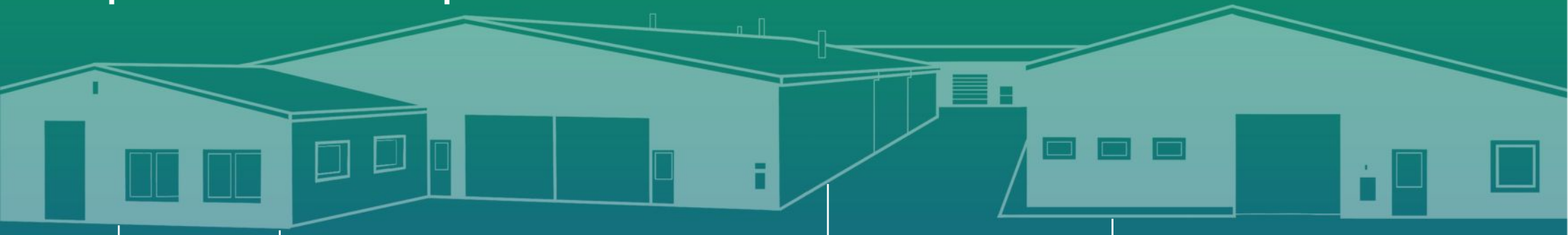
Complete autonomy from Chinese products & technologies

Heritage

Hungary is a pioneer in lighting development, production for 125+ years

Starting point

Partner/owner ship with Simotrade being established — a Hungary based company with great 30 years production experience



30+ years in lighting equipment manufacturing

Production capacity — 250,000 pcs per year with ability to be expanded up to 10 Mln lights in 2 years

Over 100 employees

Sustainable production — 40% of electricity is solar

Economics — launch phase

ROI — €20 Mln of initial investment

Cost of equipment with operating capital, etc. — €20 Mln

Construction time, delivery of equipment: *(conservative)* 9 – 12 months

Production
6 Mln LS Core™ T8 tubes per year

Sales
6 Mln pcs x €15.0 *(estimated price)* per tube

€90 Mln gross sale per year

Gross profit — €4.0 per tube *(conservative)*

Total Gross profit per year — 6 Mln x €4.0 = €24 Mln

Commissions, license fee, royalty, shareholders split — average €2.0 expenses

Net profit — €2.0 per tube made for next 10 years

One-time investment of €20 Mln results in €12 Mln profit **per year** *(conservative)*

Economics — initial spending for 6 Mln T8 tubes made annually

€12 Mln

assembly equipment

€0,5 Mln

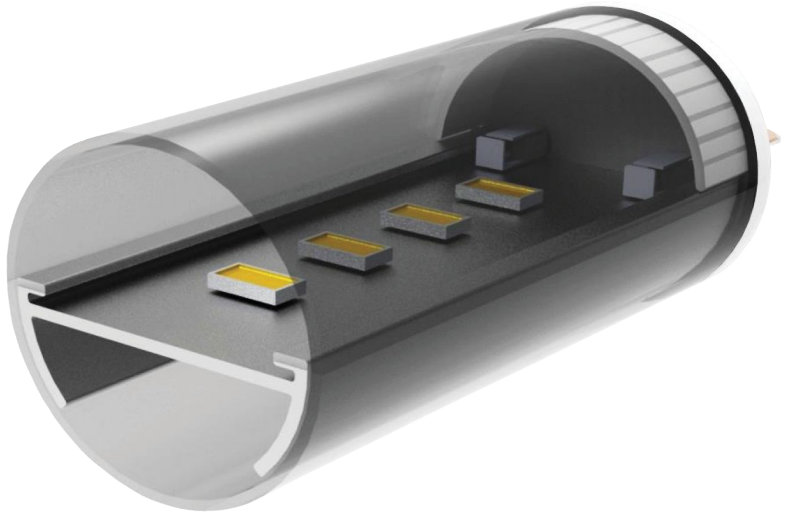
testing equipment

€3 Mln

6 months working capital

€1,35 Mln

packaging lanes, delivery, installation, laboratory set up, building preparations



Margin forecast for 60 Mln T8 tubes made annually

Investment required — €150 Mln

Large production capacity due to non-complicated manufacturing process

Possibilities to cover big clients (governmental & commercial)

Price: wholesale €9,0 – 20,0

(depending on various parameters)

€6,0	€10,0 – 15,0	€4,0
production cost	*whole sale price*	*gross margin*

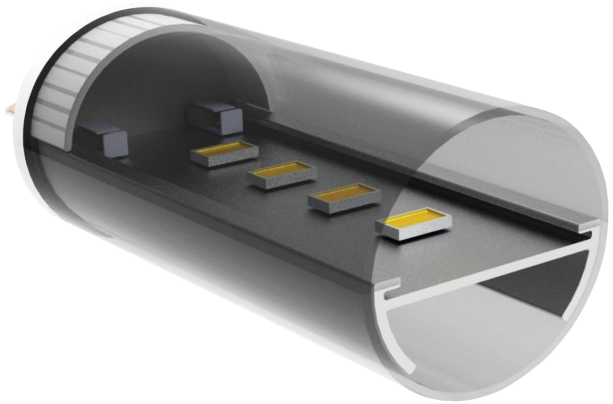
€4,0 x 60 Mln pcs = €240 Mln per year as gross profit

Sales forecast — EU/US/World

- US & EU clients are looking for **NONE Chinese High quality LED Lights**
- **USA Governmental structures are regulated BAA**
  (Buy American Act – U.S. products & technologies are preferable)
- Huge demand of T8 tubes from US government agencies, like GSA, DLA, DoE, DoD, NAVY for High efficiency (200 LmW+), longest life span, No maintenance
- **1,600 Bln T8 Fluorescent tubes** have to be replaced by LED T8 tubes just in governmental places and facilities by 2025
- Commercial market – estimated 1 Bln T8 fluorescent tubes in big retail, wholesale companies, retail chains
  (Publix, Walmart, Dixie, Saveway, etc.)

Equipment required

LS Core™ LED T8 tubes manufacturing method is based on standard equipment and processes adopted in LED Light industry



- **99% of all equipment is available** off the shelf from manufacturers
- **Only 1% has to be produced** and implemented at the launch phase
- This 1% modification adopts CNC machines work
- **LS Core™ implementation time is 3 month into existing lines**
- Most parts, components are standard and available from many suppliers. No Chinese parts!

Team of AZ Light Inc.

Over **25**
US & EU patents

Over **200**
years of experience in lighting

Over **50**
years in electronic components sales

Over **100**
years in production

LISMA
73 years

Simotrade
30 years

AZ Light
9 years

EU & US regulations

Regulations (EC) No 244/2009, EU) No 1194/2012, and (EU) 2019/2020	**Available:** *http://www.cuspe.org/wp-content/uploads/2020/07/9_v1_1_Comm_Weinold.pdf*
The European Commission, “Impact Assessment for Commission Regulation (EU) 2017/2020 pursuant to Directive 2009/125/EC,” 2020	**Available:** *https://eur-lex:europa:eu/legal-content/EN/TXT/?uri=celex:52019SC0357*
“Commission Regulation EU 1194/2012 pursuant to Directive 2009/125/EC,” 2012	**Available:** *http://data:europa:eu/eli/reg/2012/1194/oj*
“Commission Regulation (EU) 2017/2020 pursuant to Directive 2009/125/EC,” 2020	**Available:** *http://data:europa:eu/eli/reg/2013/1303/oj*
US Department of Energy, “Characterizing photometric flicker,” 2018	**Available:** *https://www:energy:gov/eere/ssl/downloads/characterizing-photometric-flicker*

Thank you!

Contact: Andrey@az-light.com

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NEXT GENERATION OF LED LIGHTS