

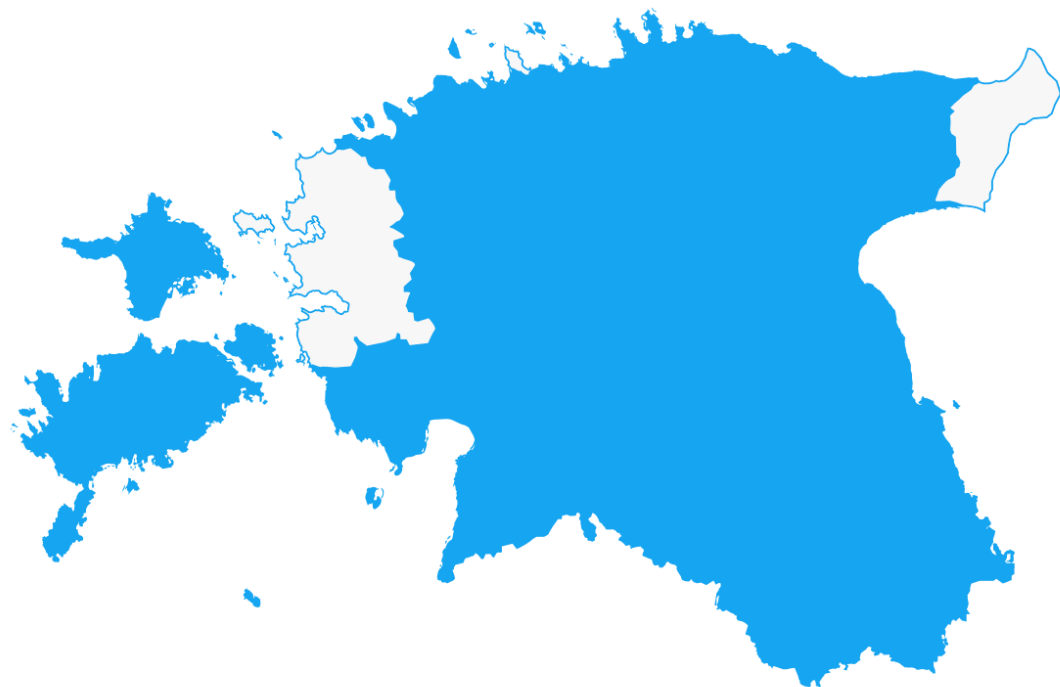
REGULATORY FRAMEWORK & INNOVATION – IN COOPERATION WITH DSO

LIBERAL REGULATION – INNOVATION ENABLER

Elektrilevi | Priit Treial
Member of the Management Board



ELEKTRILEVI – ESTONIA'S DISTRIBUTION NETWORK OPERATOR



 Elektrilevi Networks  Other service providers

730 employees

253 million € turnover
in 2017

750 million € RAB value

0.66 million clients

61 000 km of power lines



GLOBAL TRENDS WE CAN'T IGNORE

Electricity demand growth



Data traffic growth



Distributed generation (DER)

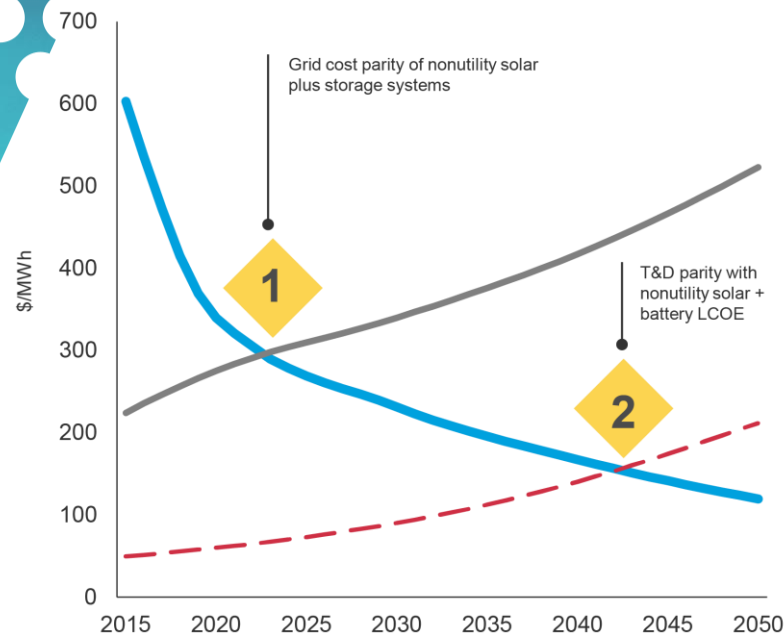


Source: 1. Global EV Outlook 2017 2. Cisco VNI, 2017. 3. PV Status Report 2017



THE RACE IS ON - NEW TECHNOLOGY VS. GRID!

- A new level of efficiency
- New challenges to integrate, control and steer all DER
- An enabler of new business models



— Non utility solar + battery LCOE — Fully delivered cost of electricity - - - Cost of transmission and distribution

**REGULATION IS LEANING TOWARDS THE
INNOVATION AND DIGITALISATION**





OUR SUCCESS: SMART METERS

- 100% smart meters + smart metering
- Reduced network losses 5.7% => 4.1%
- Client satisfaction has doubled
- Improved grid planning & investments
- 15m hourly based consumption data - big data opportunities



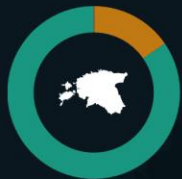


Search...



helga

Eesti



	Pärnu maakond	0/15/85
	Viljandi maakond	0/19/81
	Põlva maakond	0/18/82
	Rapla maakond	0/21/79
	Jõgeva maakond	0/23/77
	Lääne-Viru maakond	0/21/79
	Tartu maakond	0/10/90
	Järva maakond	0/17/83
	Saare maakond	0/14/86
	Harju maakond	0/12/88
	Võru maakond	0/13/87

ERICSSON

01.01.2017 - 28.02.2017

2016

2017

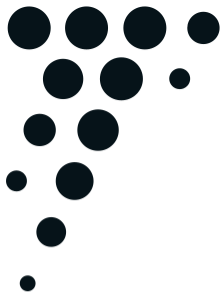


VALMIERA

ADDITIONAL FUNCTIONALITIES

- actual SAIDI
- voltage events
- fault location
- fraud and loss





REMOTE READING MAKES THE GRID VISIBLE – PREVENTIVE MAINTANANCE



01.01.2017 - 28.02.2017

2016

2017



helga

⚡ Quality log: Overvoltage L3	04/01/2017 21:15:44
⚡ Quality log: Voltage L3 resume	04/01/2017 21:15:49
⚡ Quality log: Overvoltage L3	04/01/2017 21:17:31
⚡ Quality log: Undervoltage L1	04/01/2017 21:17:59
⚡ Alarms and events: Missing ne...	04/01/2017 21:18:24
⚡ Quality log: Voltage L1 resume	04/01/2017 21:23:21
⚡ Quality log: Undervoltage L1	04/01/2017 21:24:03
⚡ Quality log: Voltage L1 resume	04/01/2017 21:24:50
⚡ Quality log: Undervoltage L1	04/01/2017 21:24:57
⚡ Quality log: Voltage L1 resume	04/01/2017 21:25:18
⚡ Quality log: Undervoltage L1	04/01/2017 21:26:28
⚡ Quality log: Voltage L1 resume	04/01/2017 21:27:02
⚡ Quality log: Voltage L3 resume	04/01/2017 21:27:29
⚡ Quality log: Overvoltage L3	04/01/2017 21:27:42
⚡ Quality log: Voltage L3 resume	04/01/2017 21:27:49
⚡ Quality log: Overvoltage L3	04/01/2017 21:27:58





**ALTERNATIVE SOLUTIONS ARE
ALLOWED TO REPLACE GRID
CAPEX**





ELECTRICITY EVERYWHERE - with minimum CAPEX

- We will substitute the classic grid investment with off-grid solutions
- Allowed in legislation
- Around 1000 connection points the investment is worthwhile
- Long-term effect 30-50 m€



„NO REGRET“ CAPEX IS ALLOWED
TO FACILITATE INNOVATION





COST CUTTING BY PV PARKS

- We target to generate network loss via PV capabilities
- Around 50% i.e. 150 GWh can be generated via PV parks owned by DSO
- TOTEX decrease up to 2m € per year



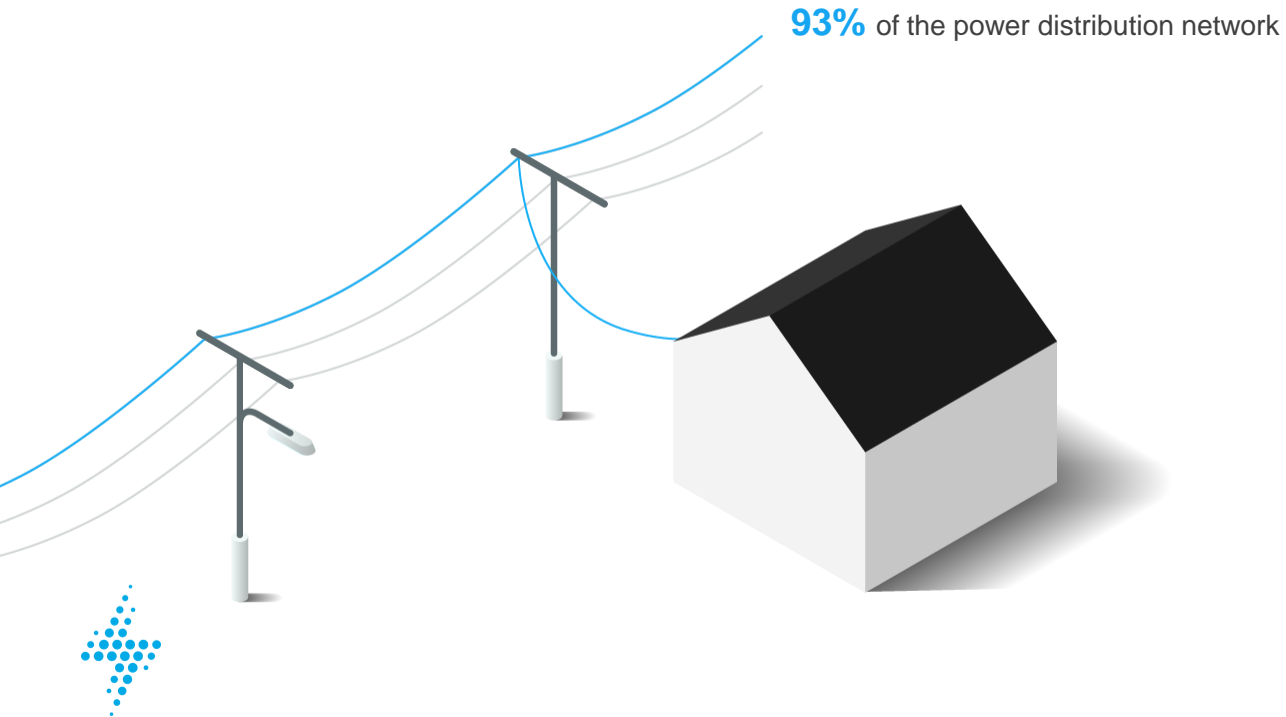


**SIMILAR SIDE ACTIVITIES ARE
ALLOWED**



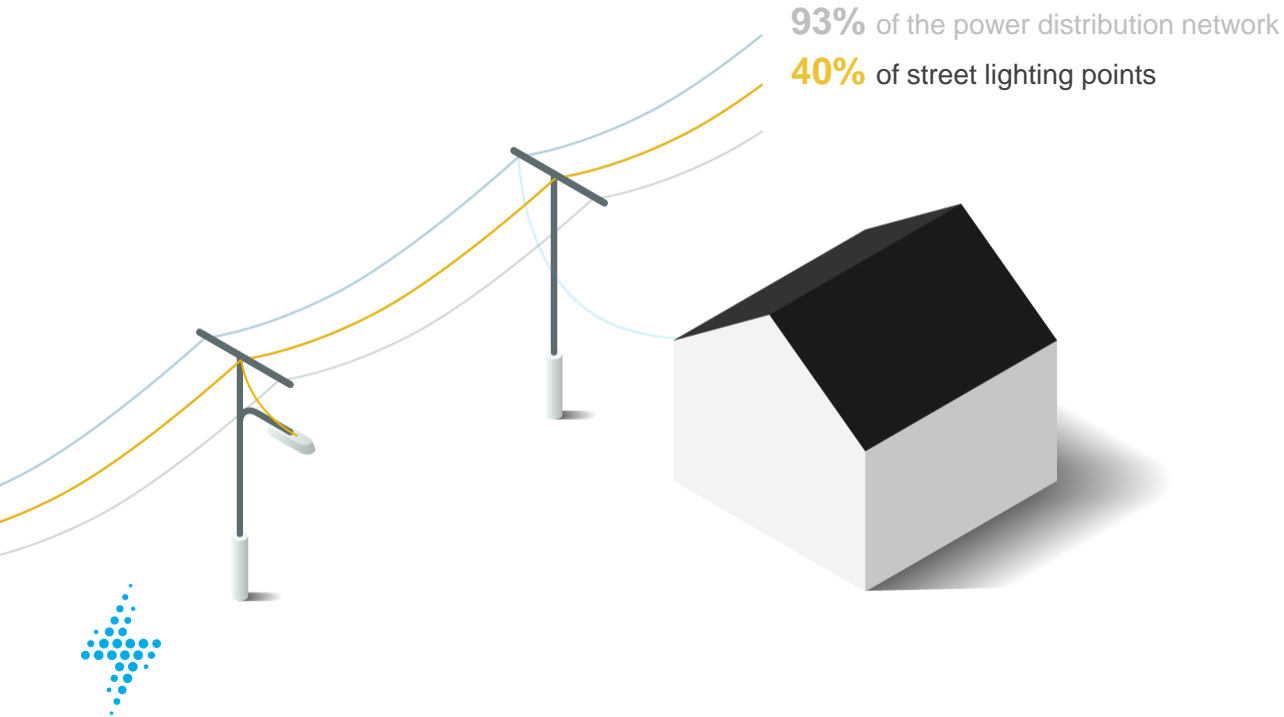


JOINT MANAGEMENT OF INFRASTRUCTURES – A STORY OF VALUE



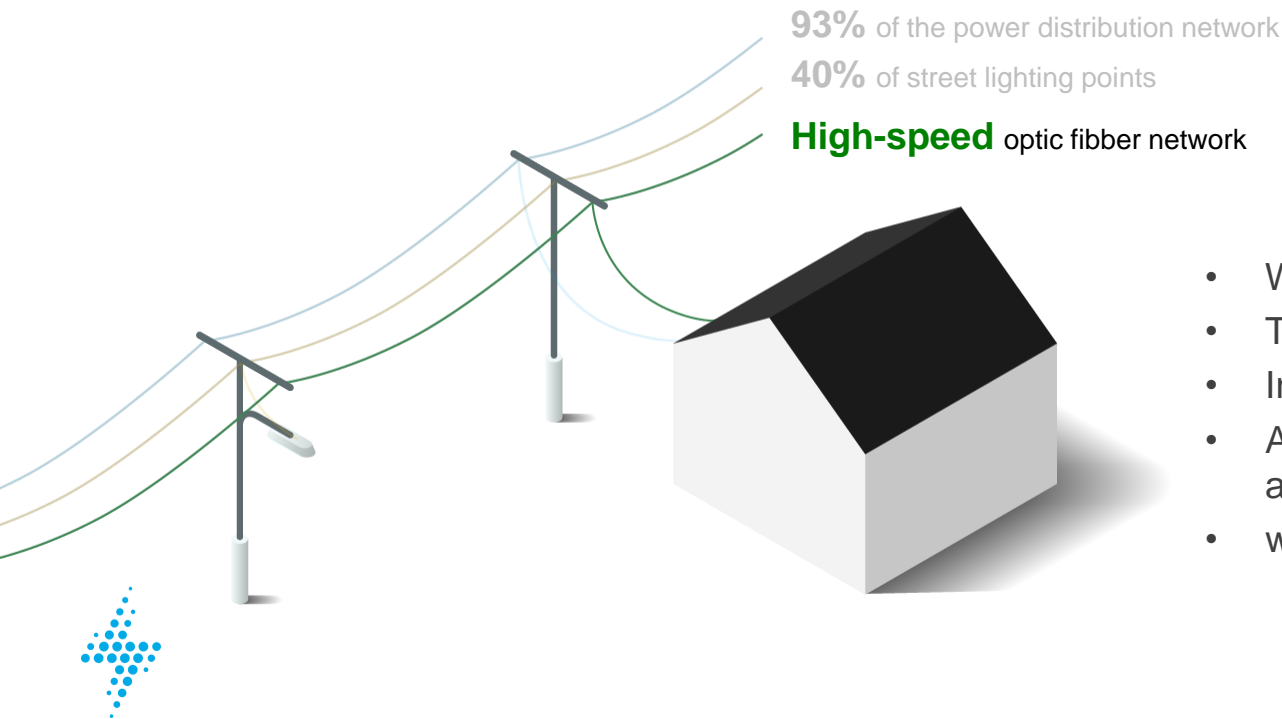


JOINT MANAGEMENT OF INFRASTRUCTURES – A STORY OF VALUE





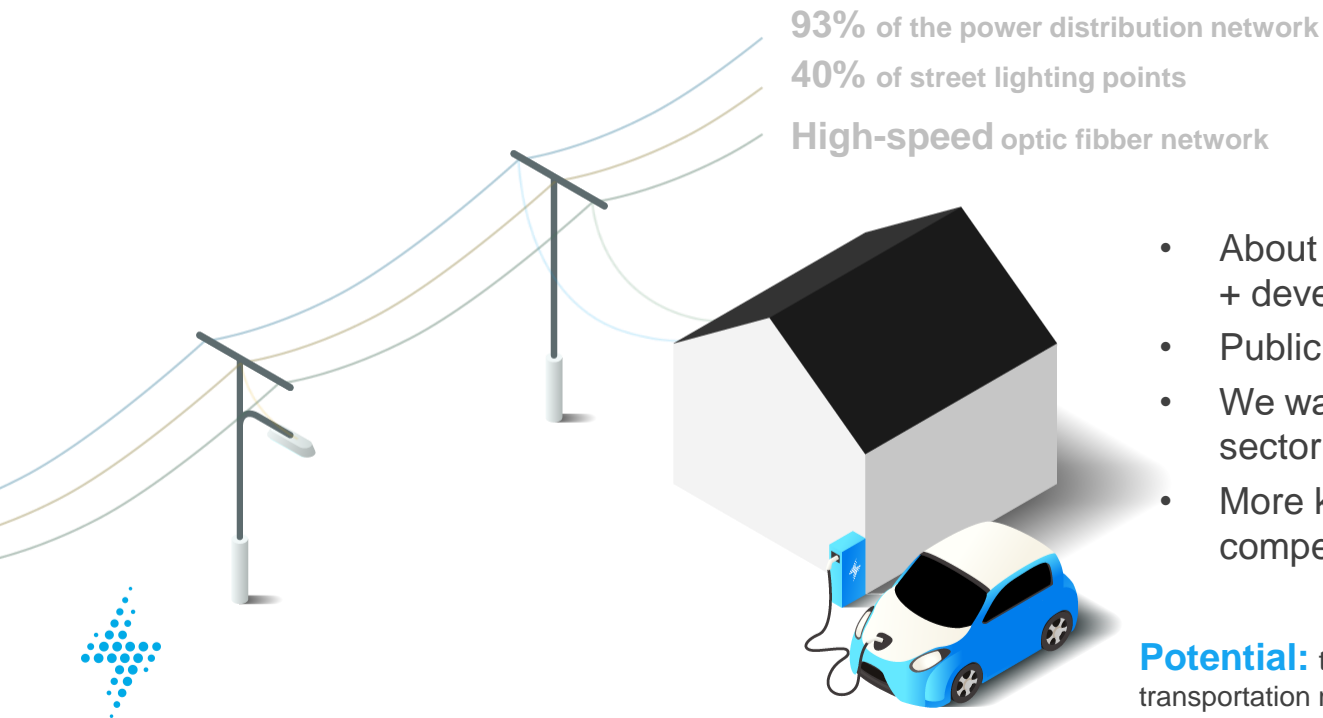
JOINT MANAGEMENT OF INFRASTRUCTURES – A STORY OF VALUE



- We great new „market place“
- Target by 2023: 0,3m clients
- Investment up to 200m € within 5Y
- After stabilization the OPEX split among grid & fibber
- win-win-win outcome



JOINT MANAGEMENT OF INFRASTRUCTURES – A STORY OF VALUE

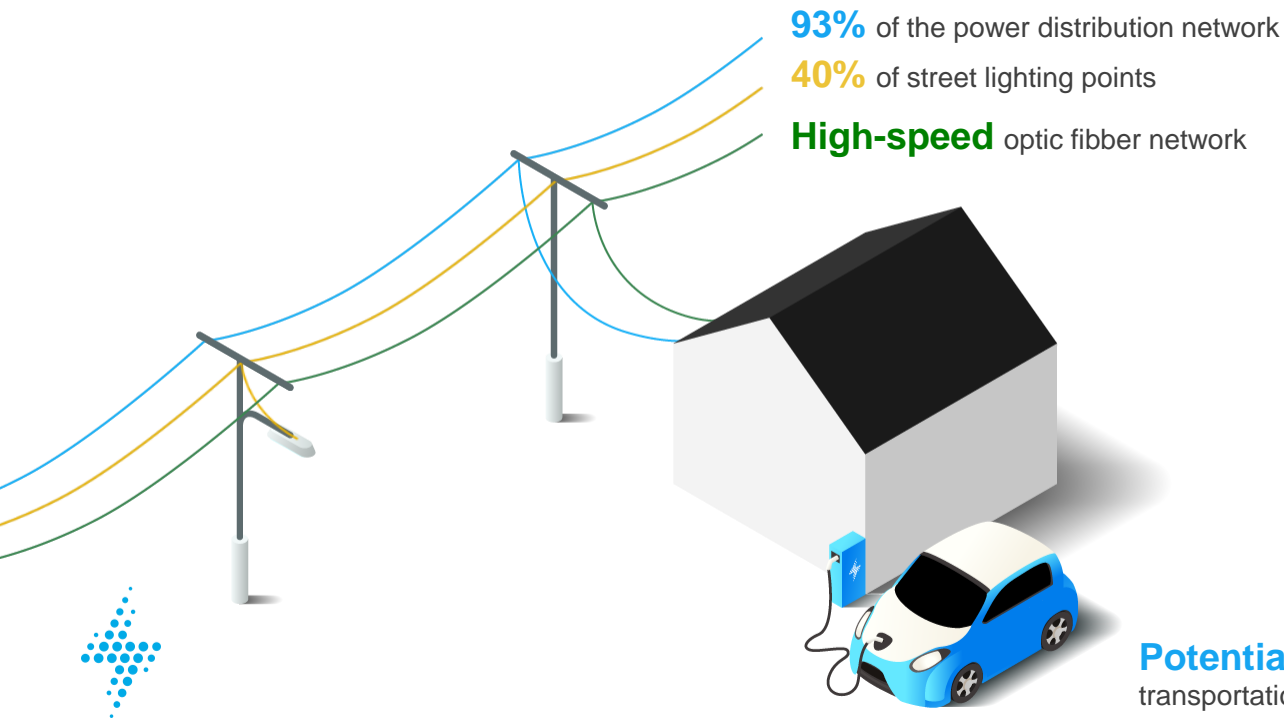


- About to obtain 160 charging stations + development plan
- Public transportations: trains & buses
- We want to be the „spokesman“ of the sector
- More kWh in grid – the more competitive is the price

Potential: the development of the electric transportation network

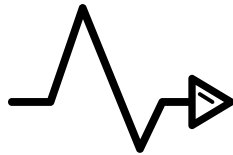


COMBINED MANAGEMENT OF INFRASTRUCTURES – A STORY OF VALUE



Potential: the development of the electric transportation network

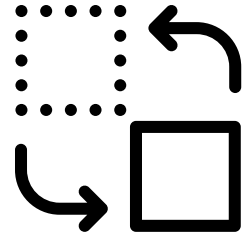
WHAT'S NEXT – NEW PRICING MODELS



Dynamic



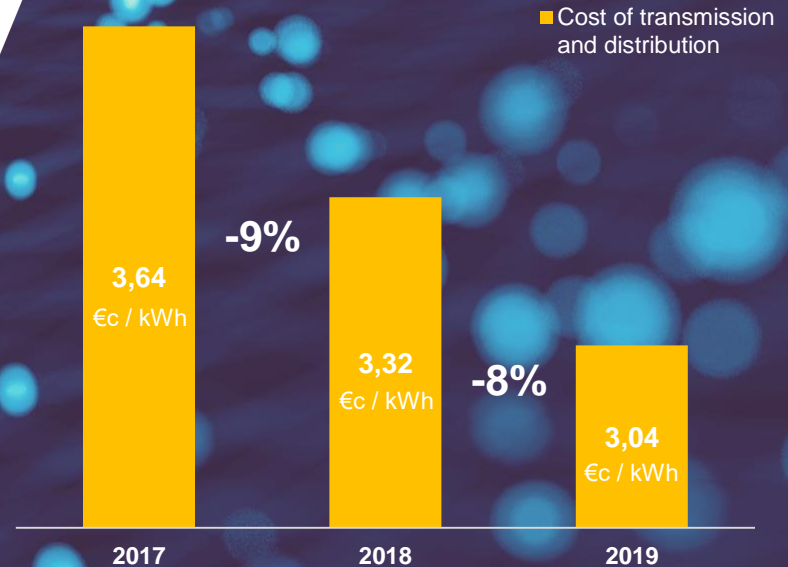
Client based



Flexibility (D&R)

DECREASING TREND IN NETWORK FEE

- Increased network volumes and more efficient grid
- Stabilized long-term OPEX & CAPEX
- Low interests rates (WACC)





@elektrilevi

THANK YOU!

Q&A?

