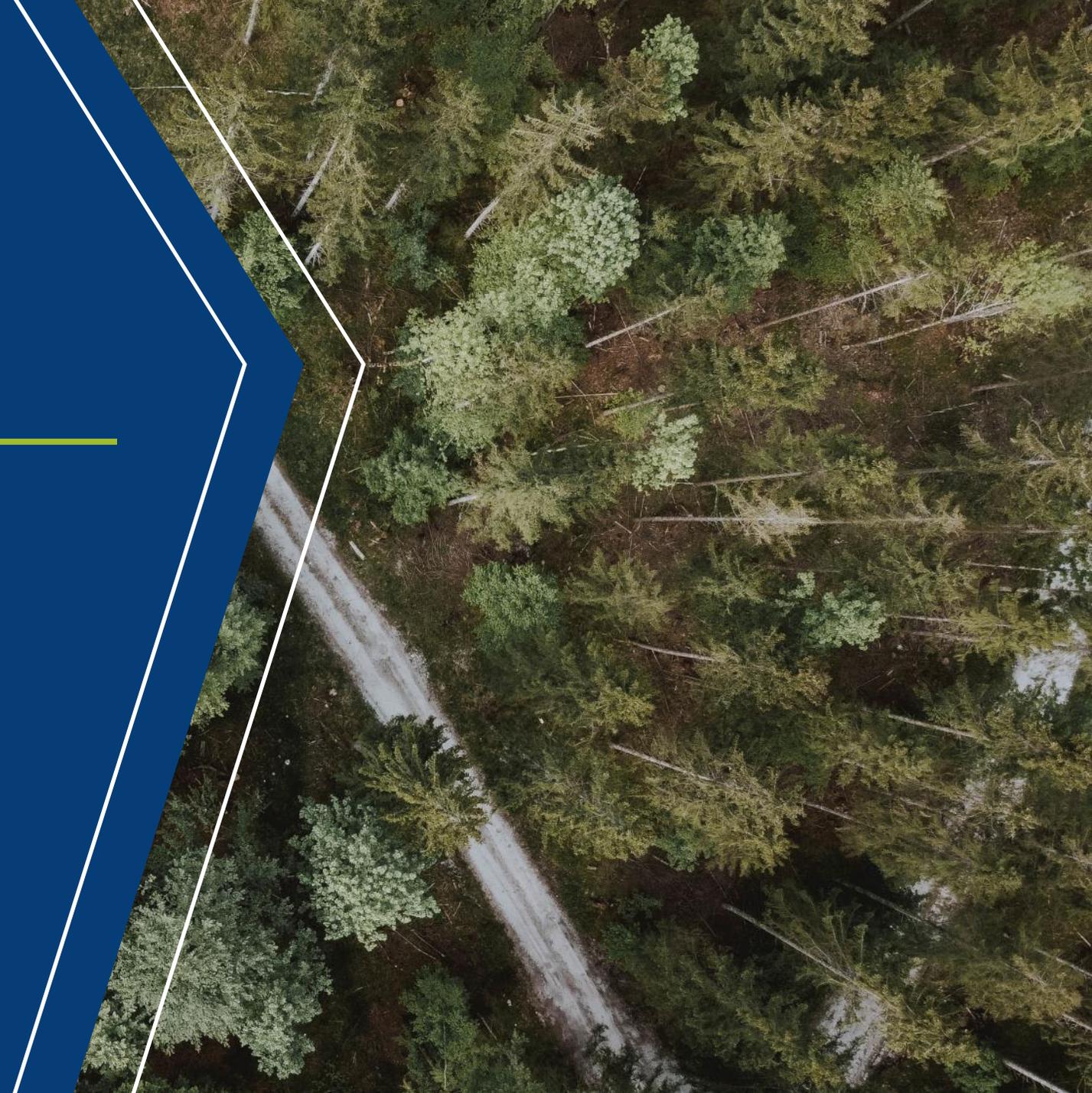


# Latvian DSO "SADALES TĪKLS"

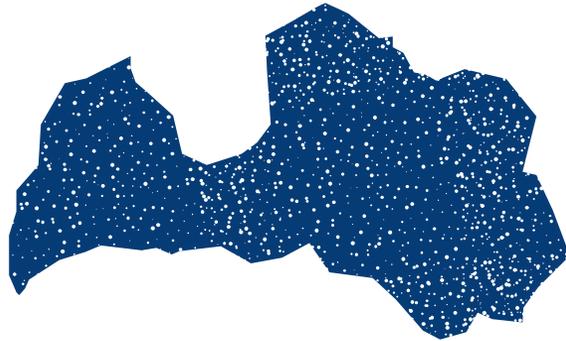
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G3-PLC Online General Assembly March 30th 2023



# SADALES TĪKLS TODAY

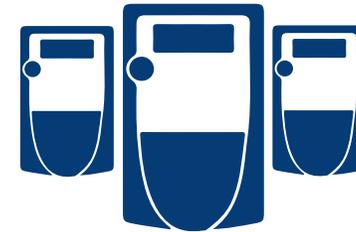
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**790 000** clients  
& 1.1M metering points



Total power lines length  
**93 000 km**  
(x2 around Earth)



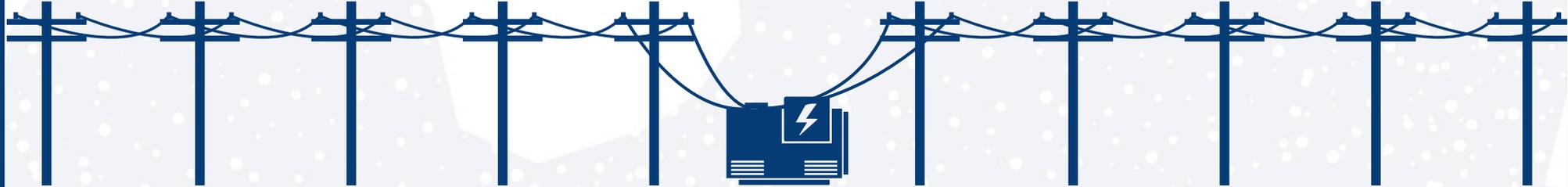
**~95%** clients with smart  
meters and  
more than **97%**  
measured of total energy  
consumption

**26 887 km**  
20/10 kV overhead lines

**135**  
110/20/10/6 kV TA

**28 441**  
20/10/6/1/0,4 kV TA

**28 949 km**  
0,4 kV overhead lines



**Total power lines length**  
**93 000 km**

**8 476 km**  
20/10/6 kV cable lines

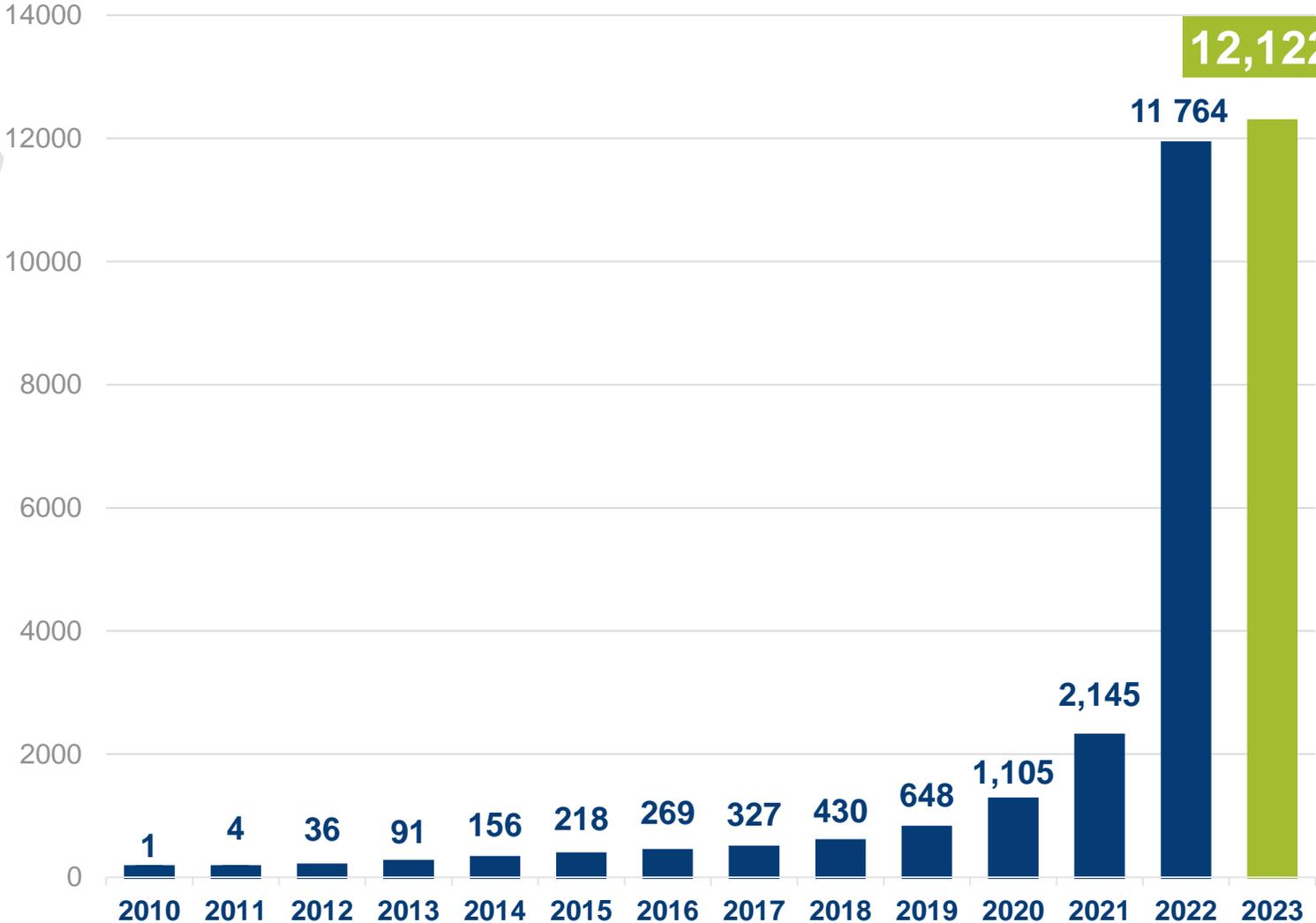
**30 892**  
20/10/6/1/0,4 kV transformers

**25 632 km**  
power lines needs to be  
cleared from trees

**28 094 km**  
0,4 kV cable lines

# GENERATION

## Installed generation (up to 11,1kW)



**12 122**  
Installed generation

**97.3**  
MW  
Total power

# SMART METERS

---



**1,1 M**

**Installed smart  
meters**

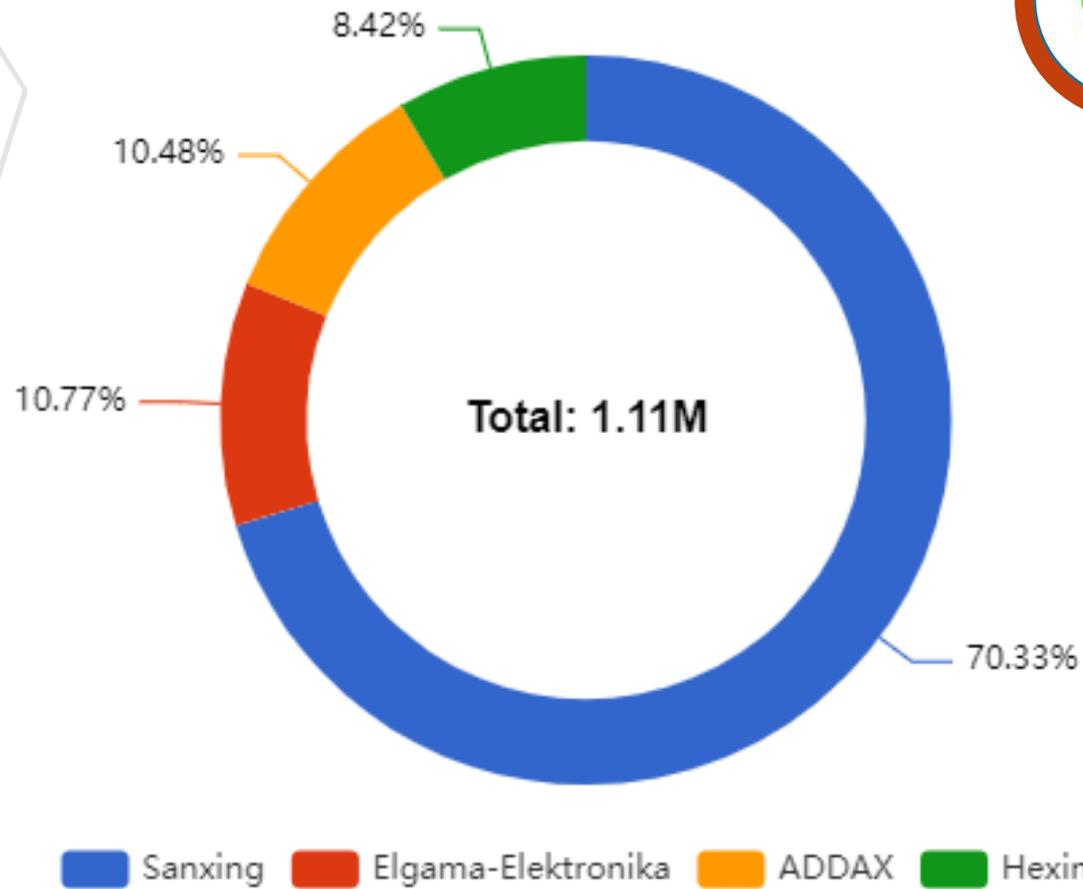
**95%**

**Total of all meters**

**97,4%**

**Count of total  
energy  
consumption**

# SMART METER VENDORS



HEXING (point-to-point)



Sanxing (G3-PLC)



ADD Grup (PLC PRIME)



Elgama (point-to-point)

# SMART METER DATA

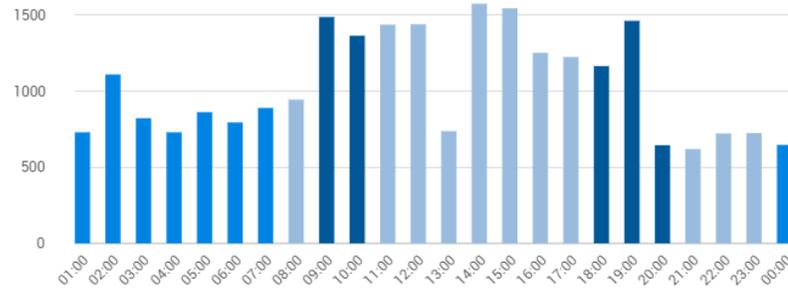
Patērētā elektroenerģija (A+) (kWh)    Reaktīvā saņemtā enerģija (R+) (kVArh)

Reaktīvā tīklā nodotā enerģija (R-) (kVArh)

20.04.2018



kWh



Hourly  
consumption  
(energy profile)



Monthly billing



- Events & Alarms
- Power quality
- Instantaneous values
- Relay remote control

# ENERGY PROFILE KPI

94%

avg. EP KPI

## ENERGY PROFILE KPI, 08h

Energijas profils, KOPĀ

26.02.2023

93.6%

-0.3% last week



Sanxing

12.03.2023

90.9%

-2.1% last week



Hexing

12.03.2023

95.5%

+0.0% last week



Addax

12.03.2023

96.2%

+0.2% last week



Elgama

12.03.2023

97.1%

-0.2% last week



# BILLING PROFILE KPI

99%

avg. BP KPI

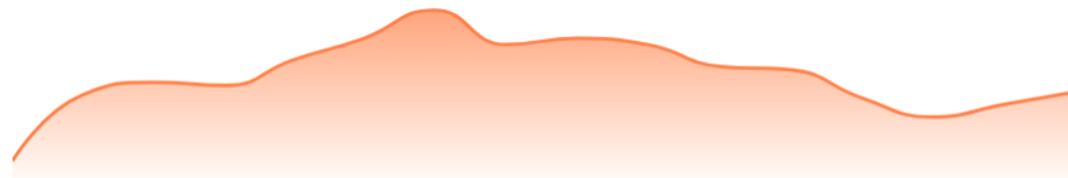
## BILLING PROFILE KPI

Norēķinu profils, KOPĀ

Feb 2023

98.9%

+0.0% last month



Sanxing

Feb 2023

99.0%

+0.0% last month



Hexing

Feb 2023

98.7%

+0.0% last month



Addax

Feb 2023

98.6%

+0.1% last month



Eglama

Feb 2023

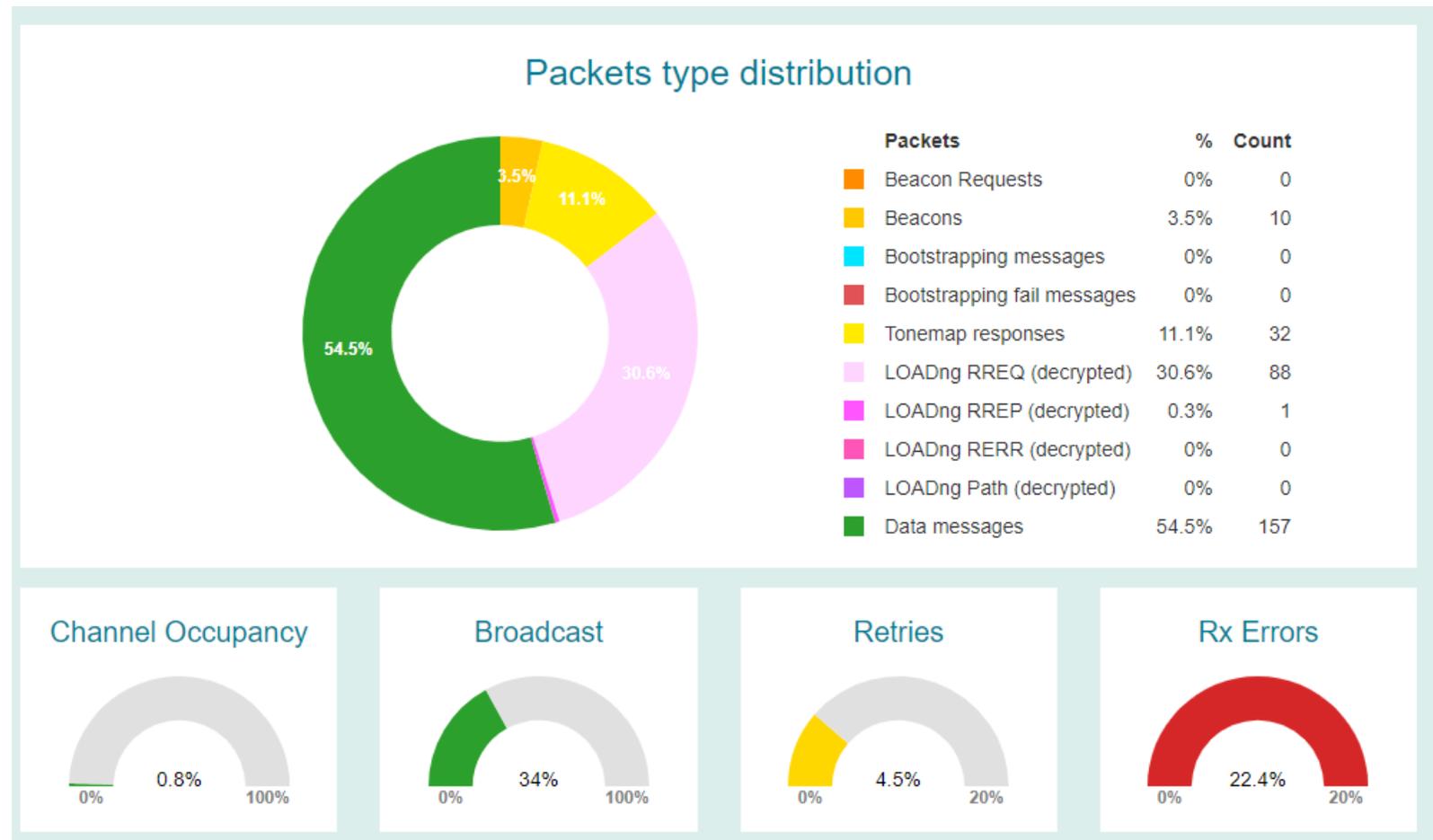
98.9%

+0.1% last month



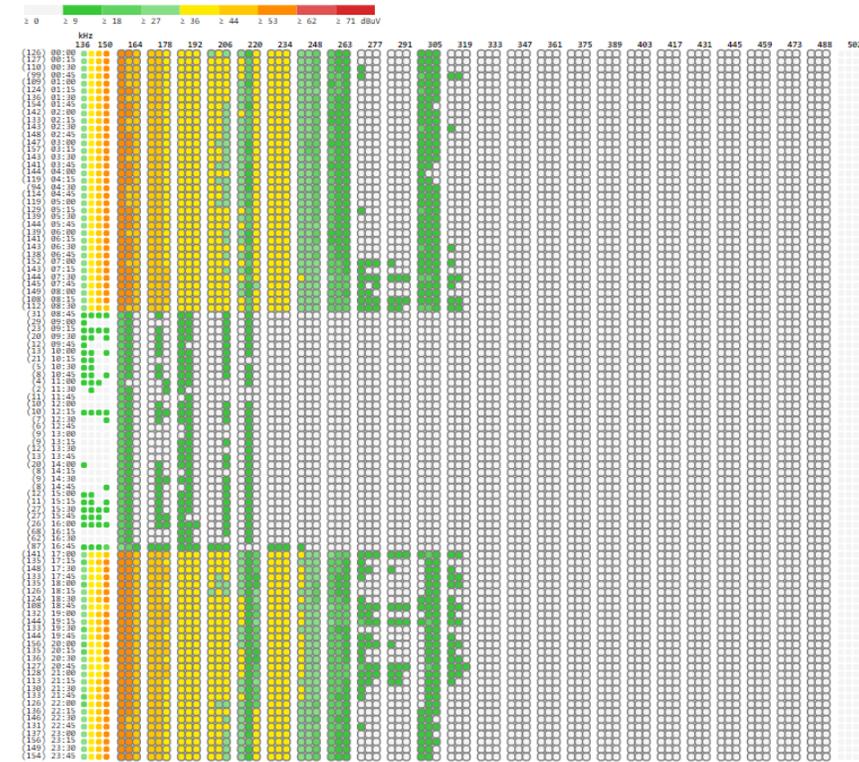
# G3-PLC READING ISSUES

Statistics on the number of different frames: LOADng accounts for too much, especially during the time when the meter initiate registration

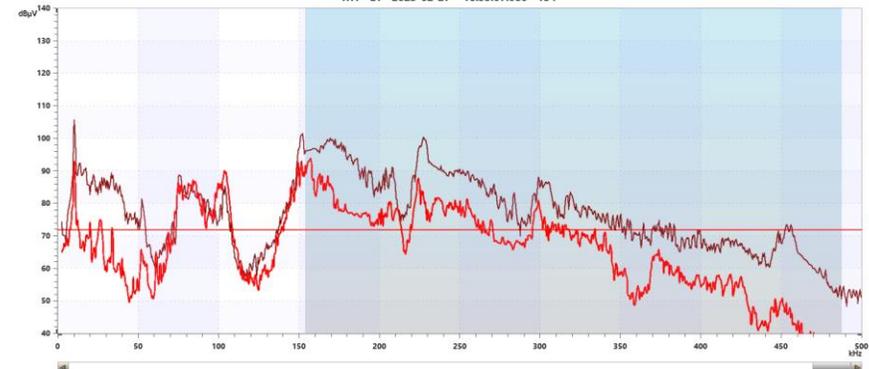


# G3-PLC READING ISSUES

Noise source – outdoor led floodlight

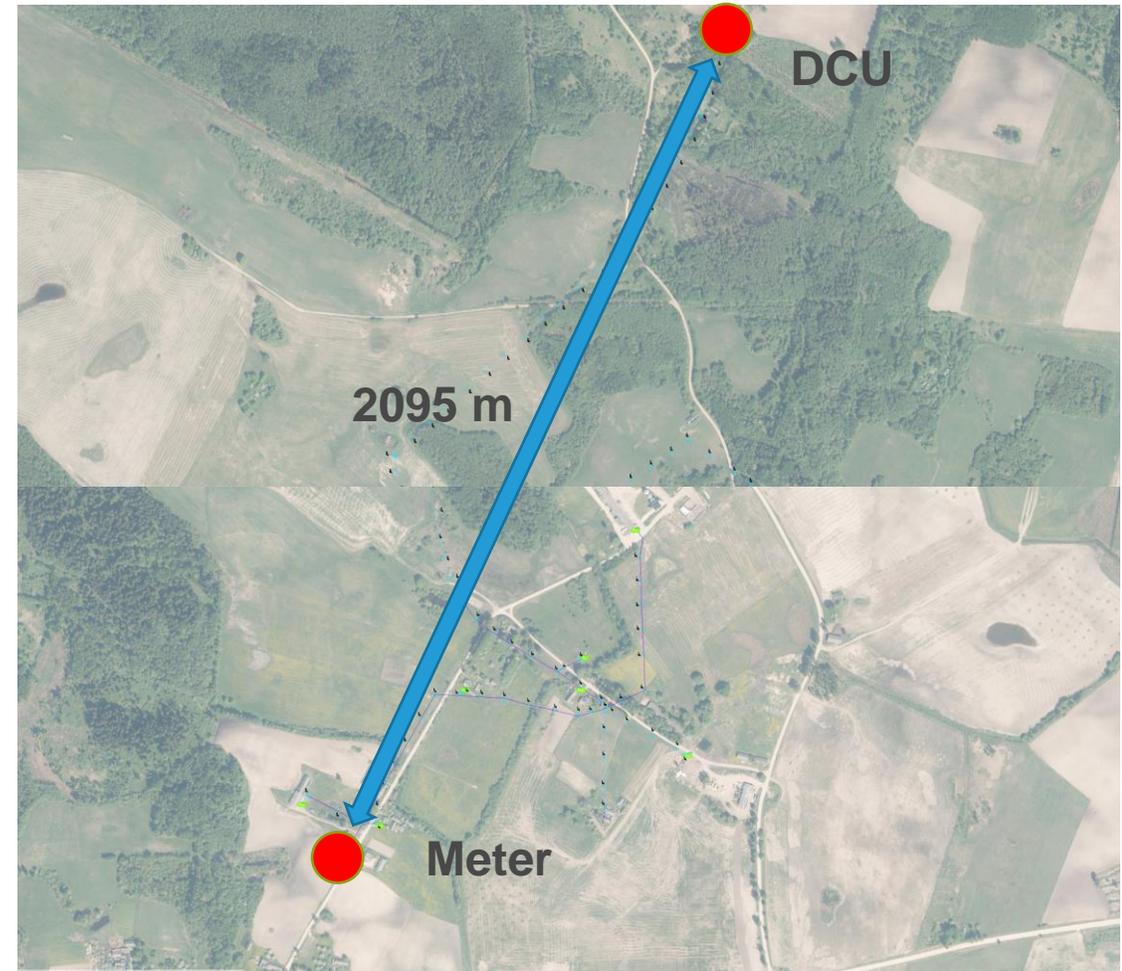
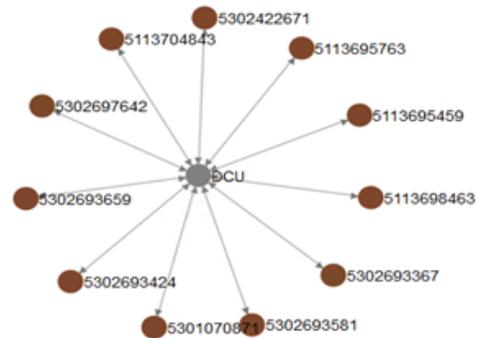


Tr.1 - L1 - 2023-02-27 - 18:55:07.080 - 154



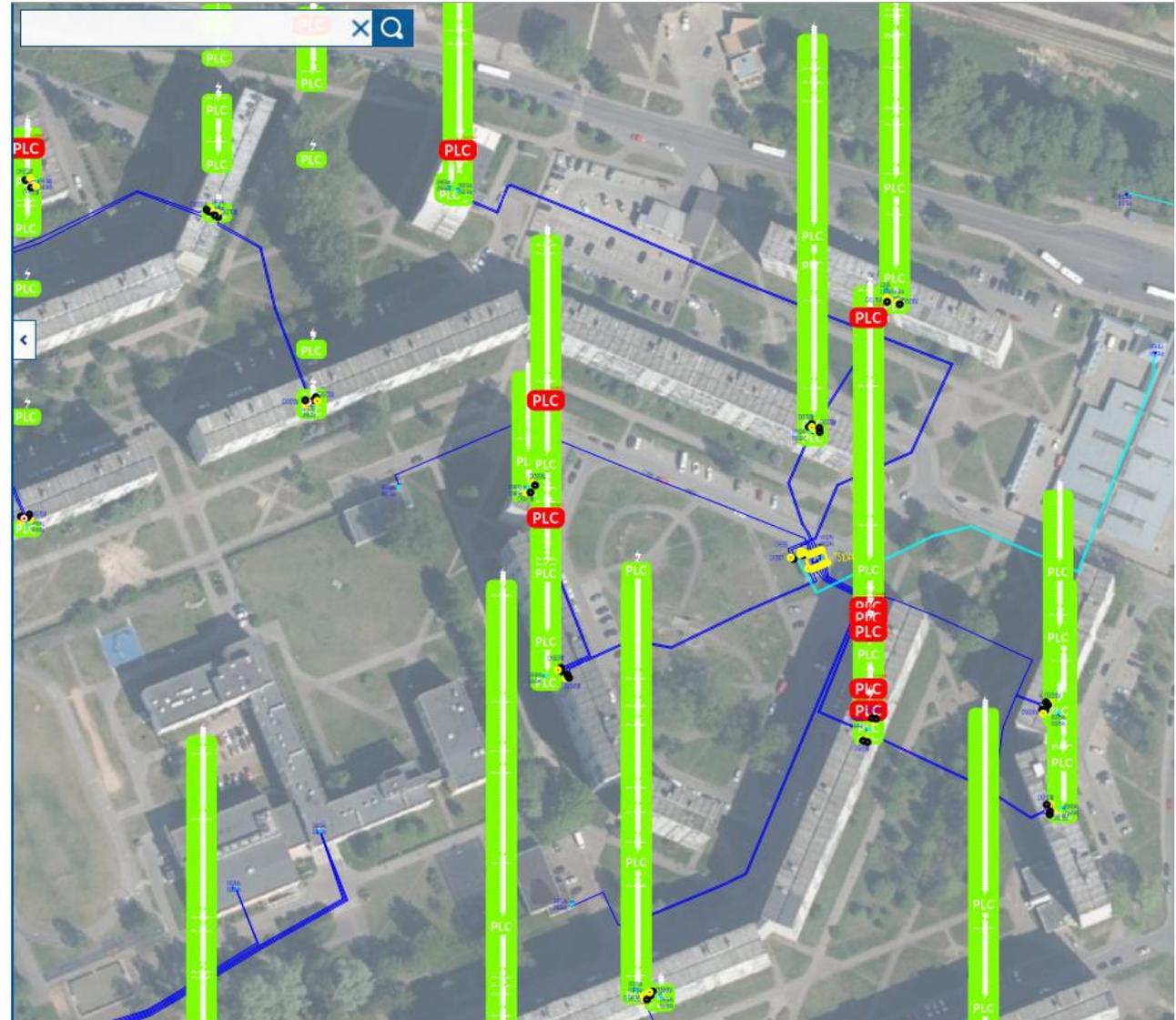
# G3-PLC LONG DISTANCE READINGS

- METER STATUS : Readable
- Communication : G3 PLC, FCC frequency band
- Overhead power line;
- Distance to DCU : **2095 m**



# G3-PLC biggest number of meters in one transformer station

Installed DCUs: 2pcs;  
Installed meters: **1.17k pcs**;  
Currently unreachable meters: 8pcs;





**Thank You!**

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