



GRÜNE ANTWORT

#INTELLIGENTSOLUTIONS



GA



10 YEARS



15+ COLLEAGUES



20+ PROJECTS/YEAR



MORE THAN 200.000 KM PER YEAR

CERTIFICATIONS

Solution
Partner

Building
Technologies

SIEMENS

IBM
Registered
Business Partner

RACE TO ZERO



ÁRKOSSY MÁTÉ
CEO



DEMJÁN ZSOLT
CTO



VIGH PÉTER
BUILT AUTOMATION DIVISION MANAGER
AUTOMATION ENGINEER



VITÉZ TAMÁS
TECHNOLOGICAL EXPERT

GA

GRÜNE ANTWORT



BUILDING AUTOMATION



ENERGYCLIPPER

CUSTOM BUILDING AUTOMATION
SYSTEM INTEGRATION

STANDARD SIEMENS BUILDING
AUTOMATION

BUILDING AUTOMATION STRATEGY

ELECTRICAL INSTALLATION, PRODUCTION



ELECTRICAL INSTALLATION

ELECTRICAL CONTROL CABINET-
PRODUCTION

OTHER FEATURED PRODUCTS



CLEANROOM MONITORING SYSTEM

OPTIMIZING CONTRACTED POWER

IRMA - MAINTENANCE ASSISTANT

MANDATORY ELECTRICAL SUB-METERING

SELLING AND INSTALLING ELECTRIC
CAR CHARGERS AND ACCESSORIES

THE IMPACT OF SMART DEVELOPMENTS



ENERGY EFFICIENCY

THE IMPLEMENTATION OF **SMART TECHNOLOGIES** MAKES **FACILITY MANAGEMENT'S** WORK SIMPLER AND MORE **COST-EFFECTIVE**. ENERGY CONSUMPTION IS REDUCED!



FAST RETURN ON INVESTMENT

INTELLIGENT INVESTING **CAN PAY FOR ITSELF IN 6 MONTHS**.



REDUCING CARBON FOOTPRINT

AFTER THE PAY-OFF OF THE INTELLIGENT CONTROL THE **EXTENT OF SAVINGS** AND THE COMPANY'S **ECOLOGICAL FOOTPRINT** **DECREASE** SIGNIFICANTLY.

THE SMART BUILDING ONLY USES AS MUCH ENERGY AS IT NEEDS. THIS IS NOT ONLY GOOD FOR OUR WALLETS, BUT ALSO FOR THE ENVIRONMENT.

ANDRÁS MEDVECZKY, SIEMENS



WHAT CAN BE THE FIRST STEP?



SURVEY OF THE BUILDING



PREPARATION OF ENERGY STRATEGIES



EXPERTISE INVESTIGATION OF THE AUTOMATION



PREPARING INTEGRATION TASKS



OTHER ENGINEERING SERVICES



GA

MANUFACTURER-INDEPENDENT BUILDING AUTOMATION INTEGRATION



GA

GRÜNE ANTWORT BUILDING AUTOMATION = PEAK SHAVING

INSTANT ENERGY
SAVINGS,

FAST RETURN

HVAC



CONTROL OF THE:
AIR CONDITIONING,
HEATING,
VENTILATION

SYSTEM INTEGRATION



HONEYWELL
SIEMENS
JOHNSON CONTROLS
SCHNEIDER ELECTRIC

MAINTENANCE



QR CODE
CLOUD SERVICE
MAINTENANCE ALERTS
GEOTAG
MAINTENANCE LOG

PEAK LEVEL MANAGEMENT



OPTIMISATION
DECREASING TYING
ENERGY SAVINGS
COST REDUCTION

GA

BUILDING AUTOMATION

RETURN ON
INVESTMENT OF
UP TO SIX
MONTHS!

- ✓ SELF-DEVELOPED, CUSTOMISED SYSTEM (SOFTWARE & HARDWARE)
- ✓ RESPONSIVE INTERFACES
- ✓ TRANSPARENT STRUCTURE
- ✓ COMPANY-TAILORED, UNIQUE LOOK – DIGITAL TWINS

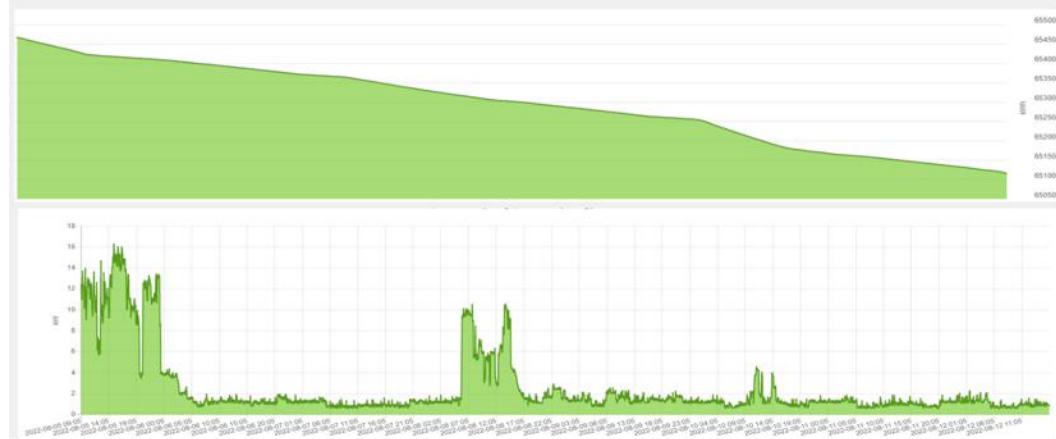
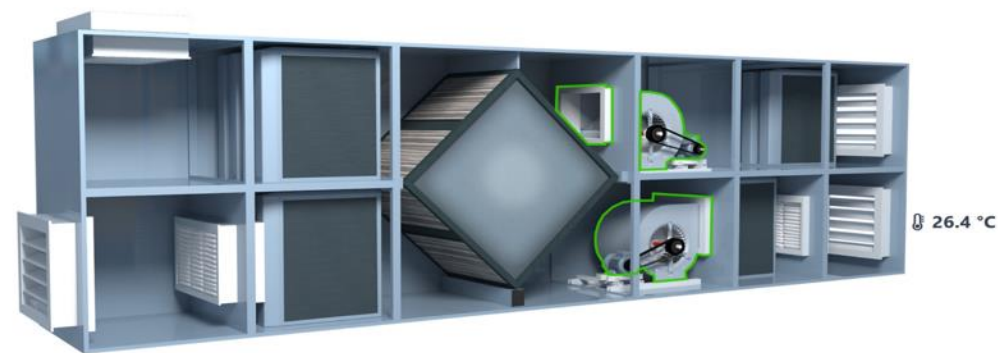


GA

BUILDING AUTOMATION

- ✓ ENERGY SAVINGS
- ✓ EFFICIENCY
- ✓ COMPREHENSIVE INTEGRATED CONTROL SYSTEM
- ✓ COMPLETE CONTROL
- ✓ FULL SERVICE – FROM SURVEY TO OPERATION

REDUCTION OF
THE ECOLOGICAL
FOOTPRINT AND
ENERGY
CONSUMPTION



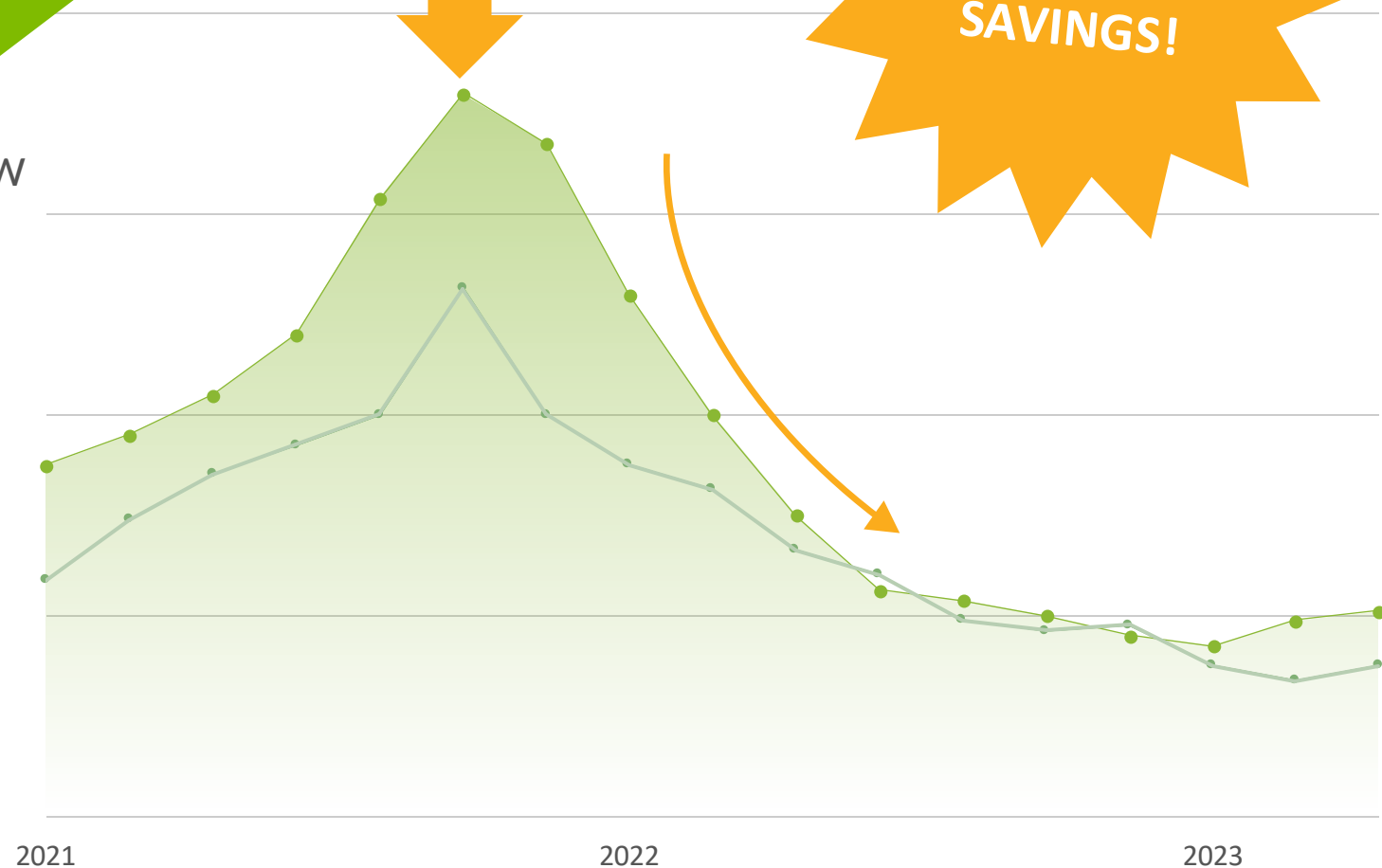
GA

THE BEGINNING OF USING
GA BUILDING AUTOMATION



20-30%
ELECTRICITY
SAVINGS!

kW



FAST RETURN



INTEGRATING EXISTING
AND NEW SYSTEMS



COMPLETE CONTROL



REMOTELY CONTROLLABLE SYSTEM

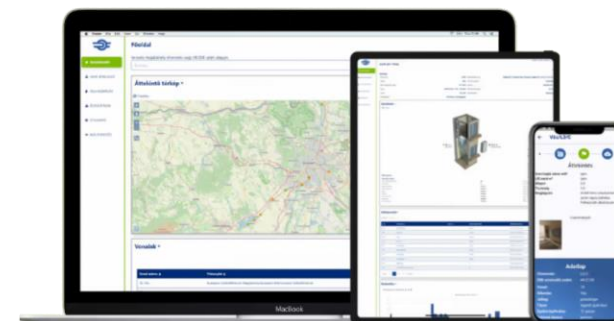


FULL SERVICE
– FROM SURVEY TO OPERATION

GA

IRMA MAINTENANCE ASSISTANT

- ✓ A SMART SOLUTION
- ✓ EFFICIENT OPERATION
- ✓ FAST RETURN ON INVESTMENT



- ✓ ALERTS
- ✓ REPORTS
- ✓ HISTORY BOARD



GA

SIEMENS SOLUTION PARTNER

SINCE APRIL 2020 WE ARE AUTHORISED
TO SUPPLY, INSTALL, MAINTAIN AND
SERVICE SIEMENS PRODUCTS



Solution
Partner

Building
Technologies

SIEMENS

Partner Certificate

siemens.com/buildingtechnologies

Solution
Partner

Building
Technologies

SIEMENS

A Siemens Zrt., Smart Infrastructure, Building Products üzleti terület igazolja, hogy

a **Grüne Antwort Kft.**
eleget tesz a Siemens Zrt. Building Products üzleti területe által meghatározott követelményeknek
terméktámogatás, know-how és az általa nyújtott szolgáltatások területén.
Mindezek alapján jogosult a Siemens által Magyarországon forgalmazott alábbi termékcsoportok
szállítására, telepítésére, karbantartására és szervizelésére

- Desigo CC, PX épületfelügyeleti és automatika rendszerek
- Érzékelők és beavatkozók (Acvatix, Symaro)

továbbá a Grüne Antwort Kft. jogosult az alábbi cím használatára:

**Siemens Building Technologies
Solution Partner**

Kiállítás időpontja: 2020/04/27. Érvényes a kiállítást követő 1 évig.

Medveczky András
Business Unit Head
Building Products

Stipkovits Zsuzsa
Business Administration Head
Building Products

GA

SIEMENS SOLUTION PARTNER

- ✓ DESIGO CC, ALBATROS2, PX BUILDING MANAGEMENT AND AUTOMATION SYSTEMS
- ✓ SUB-METERS, SENSORS AND INTERVENERS (ACVATIX, SYMARO)

Solution
Partner

Building
Technologies

SIEMENS





PEAK SHAVING





OPTIMISING CONTRACTED POWER



PEAK SHAVING

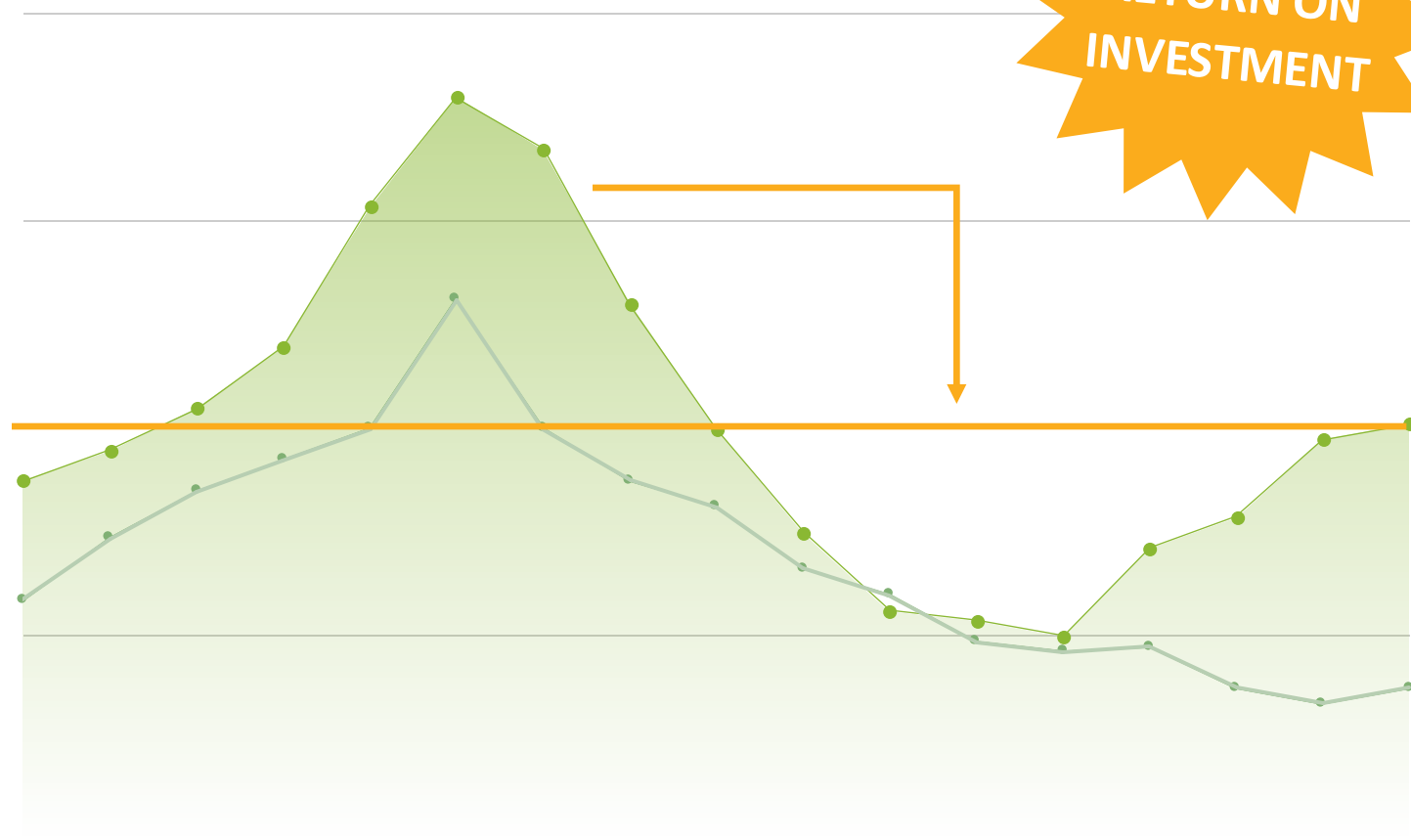
BY OPTIMISING THE CONTRACTED
POWER AND SMOOTHING
THE CONSUMPTION CURVES,
**ELECTRICITY COSTS CAN BE
SIGNIFICANTLY REDUCED!**

OUR PRODUCT OFFERS
A **MONITORING** AND/OR
INTERVENTION ENVIRONMENT
FOR THAT.

- ✓ PREDICTABLE OCCUPANCY
- ✓ SAVINGS CAN BE INCREASED
- ✓ EXPECTED CONSUMPTION-
PREVIEW



kW



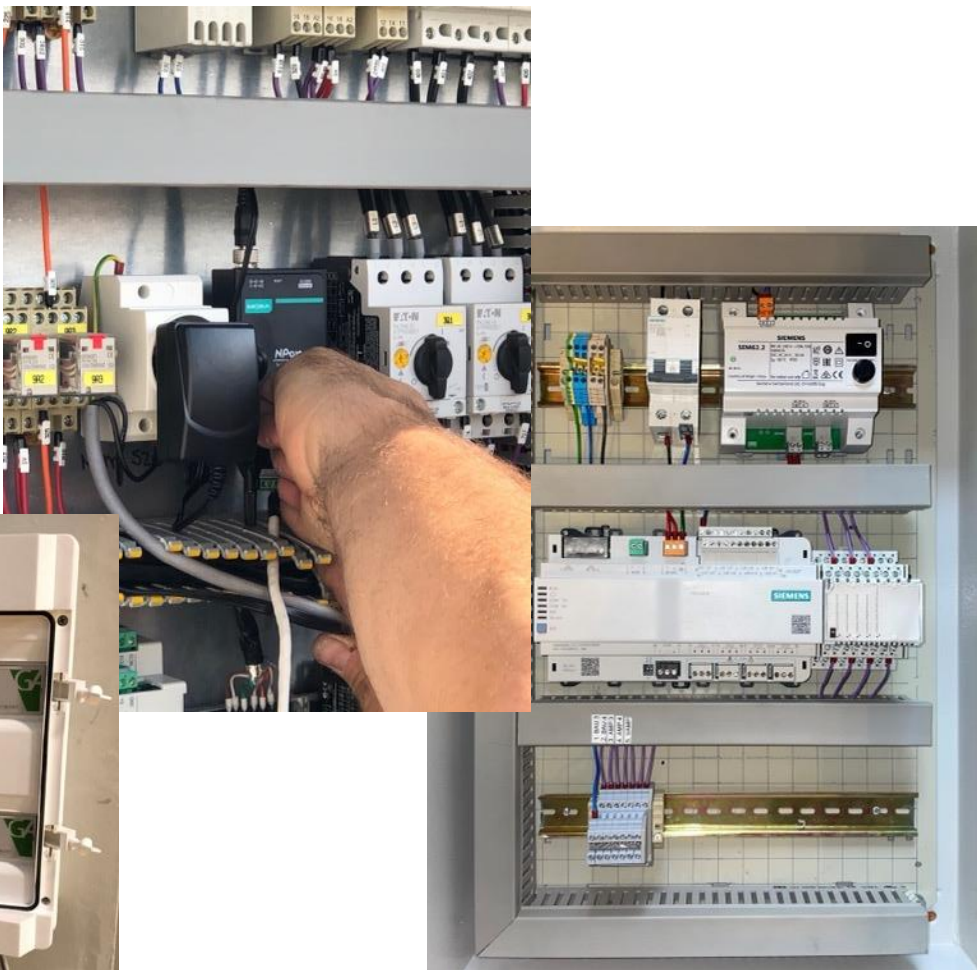


ELECTRICAL INSTALLATION, PRODUCTION



GA

ELECTRICAL IMPLEMENTATION



- ✓ COMPLETE ELECTRICAL INSTALLATION
- ✓ NATIONWIDE AVAILABILITY
- ✓ INSTALLATION OF AUTOMATIC SYSTEMS
- ✓ CONTROL CABINET-BUILDING
- ✓ TRAIL CONSTRUCTION
- ✓ LOW AND EXTRA-LOW VOLTAGE CONSTRUCTION, MEASUREMENT, INSPECTION

GA

ELECTRIC CAR CHARGERS AND ACCESSORIES

WWW.GRUNEKRAFT.HU/EN/

- ✓ 7, 11, 22 kW POWER SUPPLY
- ✓ IP67 PROTECTION, INDOOR AND OUTDOOR USE
- ✓ COMMUNICATION: BLUETOOTH, ETHERNET, WIFI, 4G, OCPP 1.6, MODBUS RTU
- ✓ MOBILE APPLICATION, RFID CARD FUNCTION
- ✓ LCD AND TOUCH SCREEN
- ✓ MID MEASUREMENT



COMPULSORY ELECTRICAL SUB-METERING

SIEMENS PAC PRODUCT LINE

1/2020. (I. 16.) MEKH DECREE – INSTALLATION DEADLINE: 1ST OF JANUARY 2023.

LAYING DOWN THE INSTALLATION POINTS OF SUB-METERS TO BE INSTALLED BY THE ECONOMIC OPERATORS OBLIGED TO USE AN ENERGY EXPERT AND THE MINIMUM REQUIREMENTS FOR SUB-METERS



INDEPENDENT ELECTRICAL EQUIPMENT WITH A RATED POWER EXCEEDING 50 KW

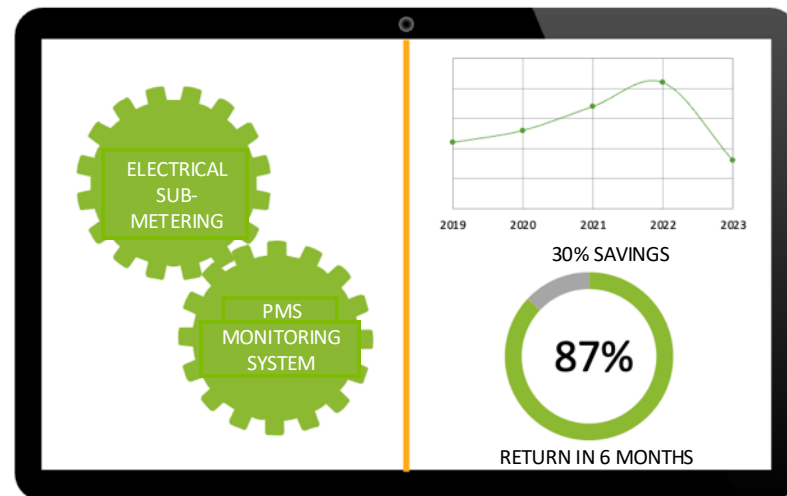


70 KW OR MORE OF RATED ELECTRICAL OUTPUT FOR HEAT GENERATORS AND AIR CONDITIONERS

GA

PMS – POWER MONITORING SYSTEM

UP TO SIX
MONTHS
RETURN ON
INVESTMENT!



REPORTING COMPLIES
WITH GOVERNMENT
REGULATIONS

AUTOMATIC
ENERGY STATEMENT
GENERATION

MODBUS TCP
PROTOCOL-
SUPPORT

CUSTOMISABLE,
USER-FRIENDLY INTERFACE

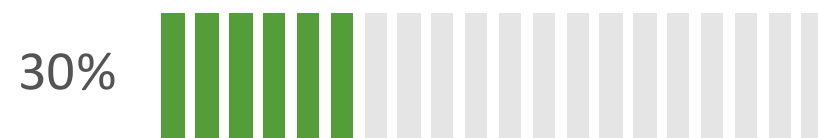
EXPANDABLE
NUMBER OF
DATA POINTS

MAKING AND
MODIFYING THE DATA
POINT NETWORK

WITH OUR SYSTEM, THE SUB-METERS REQUIRED BY THE MEKH REGULATION CAN BE CONTINUOUSLY MONITORED AND MANAGED BY CONSUMPTION.



ENERGY EFFICIENCY BY GRÜNE ANTWORT'S INTELLIGENT SOLUTIONS



ENERGY MANAGEMENT - **SAVINGS OF UP TO 30%**



COST-EFFECTIVENESS



FAST PAYBACK - **UP TO 6 MONTHS**



OPTIMISATION



FULL INTEGRATION, EASY CONTROL



PEAK SHAVING

UP TO 30% SAVINGS, FAST RETURN ON INVESTMENT



AUDITING

DESIGNING

ENERGY STRATEGY



BUILDING
AUTOMATION

ENERGY CONTROL

SCHEME CONTROL

CONTROL,
REPORTING,
INTERVENTION

SIEMENS

SIEMENS BUILDING
AUTOMATION

CONTROLLERS

DDC-K

MEASURING
INSTRUMENTS

ROOM CONTROLLERS



ELECTRICAL
ENGINEERING

LOW CURRENT
WORKS

CONTROL CABINET
PRODUCTION

ELECTRICAL
INSTALLATION



OTHER SERVICES

ELECTRIC CAR
CHARGERS AND
ACCESSORIES

DRONE SURVEY

GA

OUR PARTNERS

FURTHERMORE, RETAIL CUSTOMERS
AND PRIVATE CUSTOMERS



COMPLEX TERRITORY IMPLEMENTATION



EÖTVÖS LORÁND
TUDOMÁNYEGYETEM

RACE TO ZERO

DISCLAIMER



REFERENCES

OPEL SZENTGOTTHÁRD SINCE 2017

OPEL GERMANY SINCE 2020

SCHOTT LUKÁCSHÁZA SINCE 2019

MÁV FMR SINCE 2016

URBAN PM SINCE 2020

CAOLA SINCE 2022

NATIONAL INSTRUMENTS SINCE 2018

MET INVEST TIRANA SINCE 2019

EKI CREATIVE SINCE 2016

MAGYAR KÖZÚT SINCE 2020

TDK SINCE 2021

SHINWA SINCE 2022



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