



# 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**



**MÁTÉ ÁRKOSSY**  
Managing Director (CEO)



**ZSOLT DEMJÁN**  
Software Development Manager



**MASZLAVÉR GÁBOR**  
Financial Manager (CFO)



**VITÉZ TAMÁS**  
Operational Manager (CTO)

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# GRÜNE ANTWORT



## BUILDING AUTOMATION



CUSTOM BUILDING AUTOMATION  
SYSTEM INTEGRATION

STANDARD SIEMENS BUILDING  
AUTOMATION

BUILDING AUTOMATION STRATEGY

## ELECTRICAL INSTALLATION, PRODUCTION



ELECTRICAL INSTALLATION

ELECTRICAL CONTROL CABINET-  
PRODUCTION

## OTHER FEATURED PRODUCTS



SELLING AND INSTALLING ELECTRIC  
CAR CHARGERS AND ACCESSORIES.

OPTIMIZING CONTRACTED POWER

IRMA - MAINTENANCE ASSISTANT

MANDATORY ELECTRICAL  
SUB-METERING

# 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



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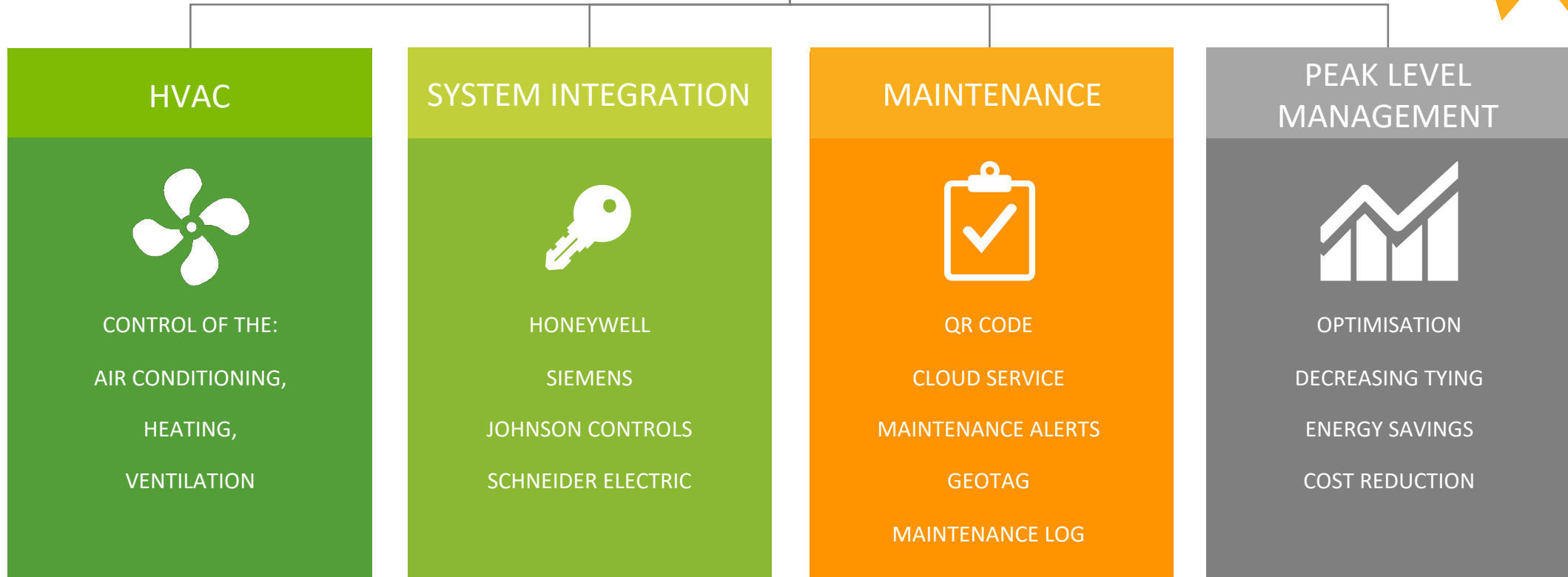
## MANUFACTURER-INDEPENDENT BUILDING AUTOMATION INTEGRATION



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# GRÜNE ANTWORT BUILDING AUTOMATION = PEAK SHAVING

INSTANT ENERGY  
SAVINGS,  
FAST RETURN



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# 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



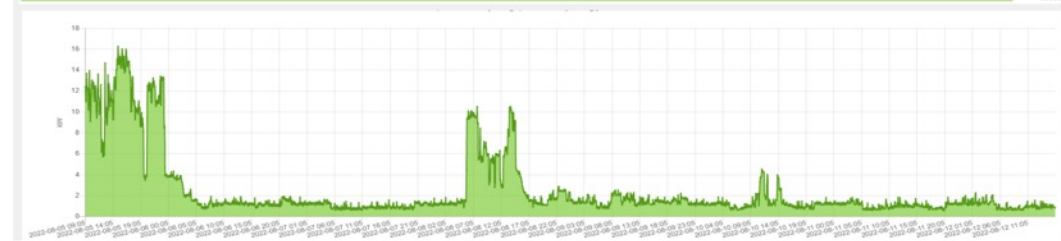
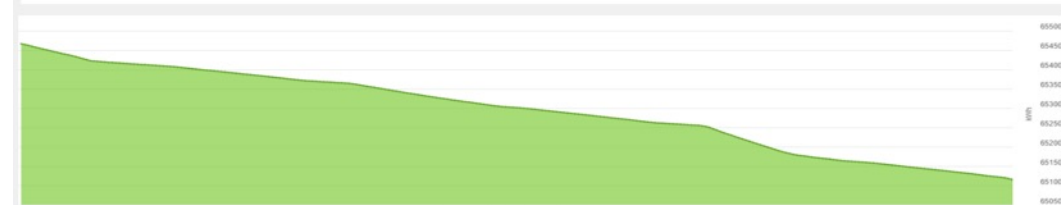
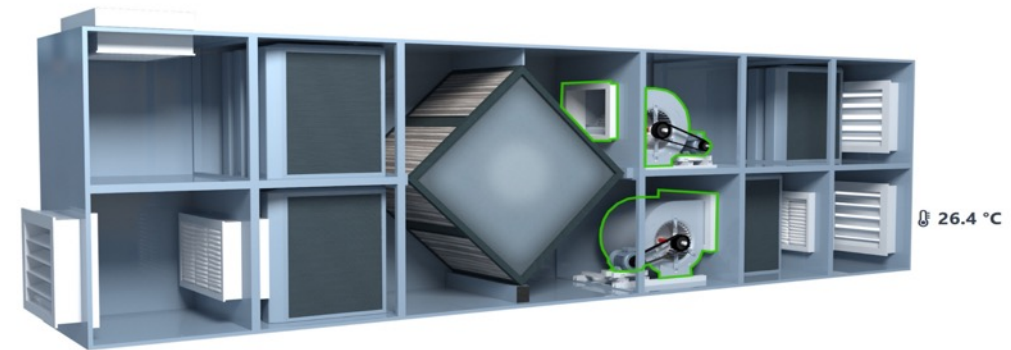


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## BUILDING AUTOMATION

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

REDUCTION OF THE ECOLOGICAL FOOTPRINT AND ENERGY CONSUMPTION



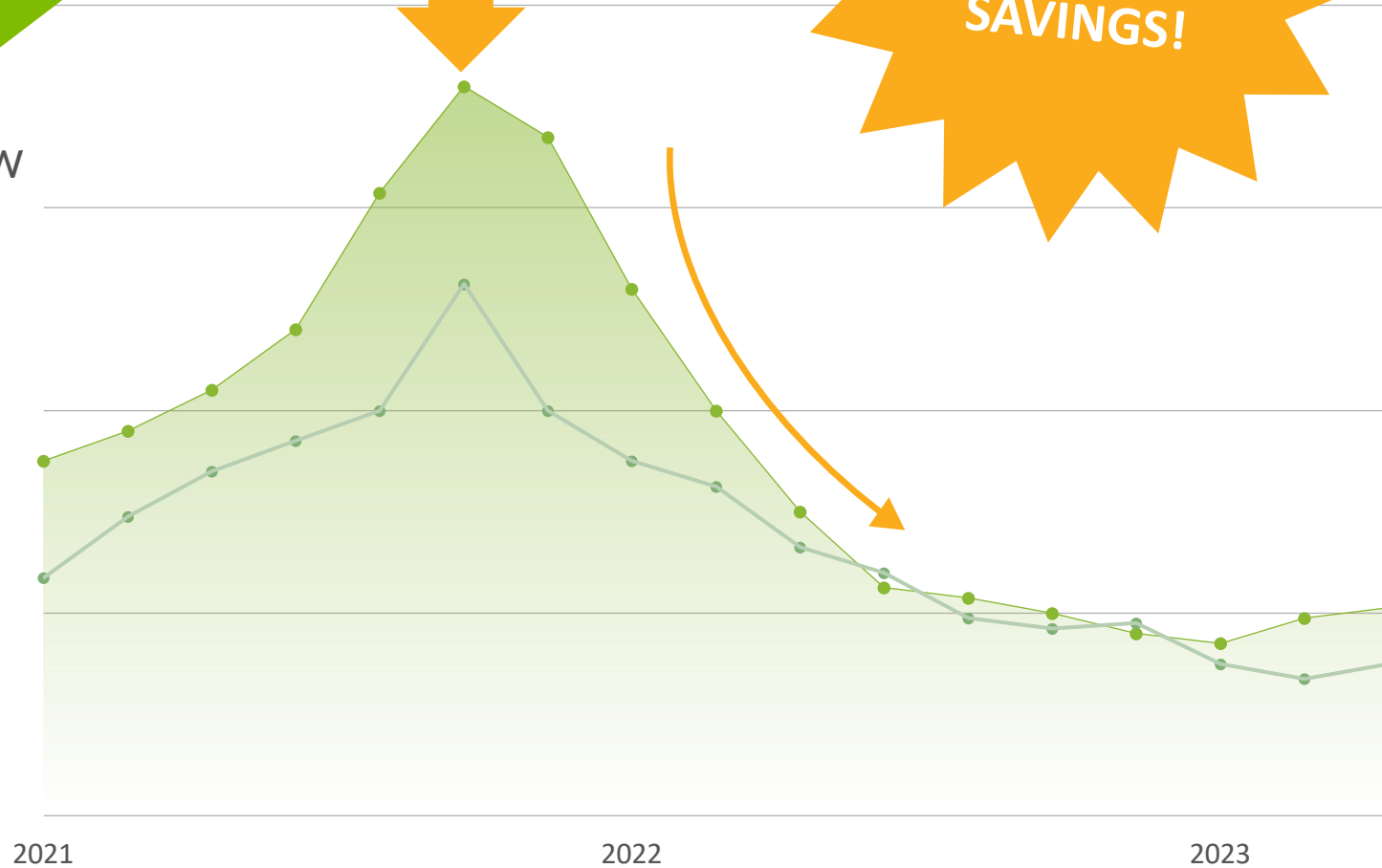
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THE BEGINNING OF USING  
GA BUILDING AUTOMATION



20-30%  
ELECTRICITY  
SAVINGS!

kW



FAST RETURN



INTEGRATING EXISTING  
AND NEW SYSTEMS



COMPLETE CONTROL



REMOTELY CONTROLLABLE SYSTEM

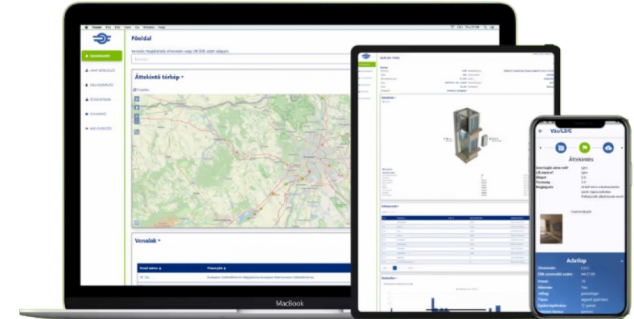


FULL SERVICE  
– FROM SURVEY TO OPERATION



# 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](https://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

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# SIEMENS SOLUTION PARTNER

✓ DESIGO CC, ALBATROS2, PX BUILDING MANAGEMENT  
AND AUTOMATION SYSTEMS

✓ SUB-METERS, SENSORS AND INTERVENERS  
(ACVATIX, SYMARO)

Solution  
Partner

Building  
Technologies

SIEMENS

Desigo CC V5.0  
**More features.  
Better monitoring.**



**PEAK SHAVING**





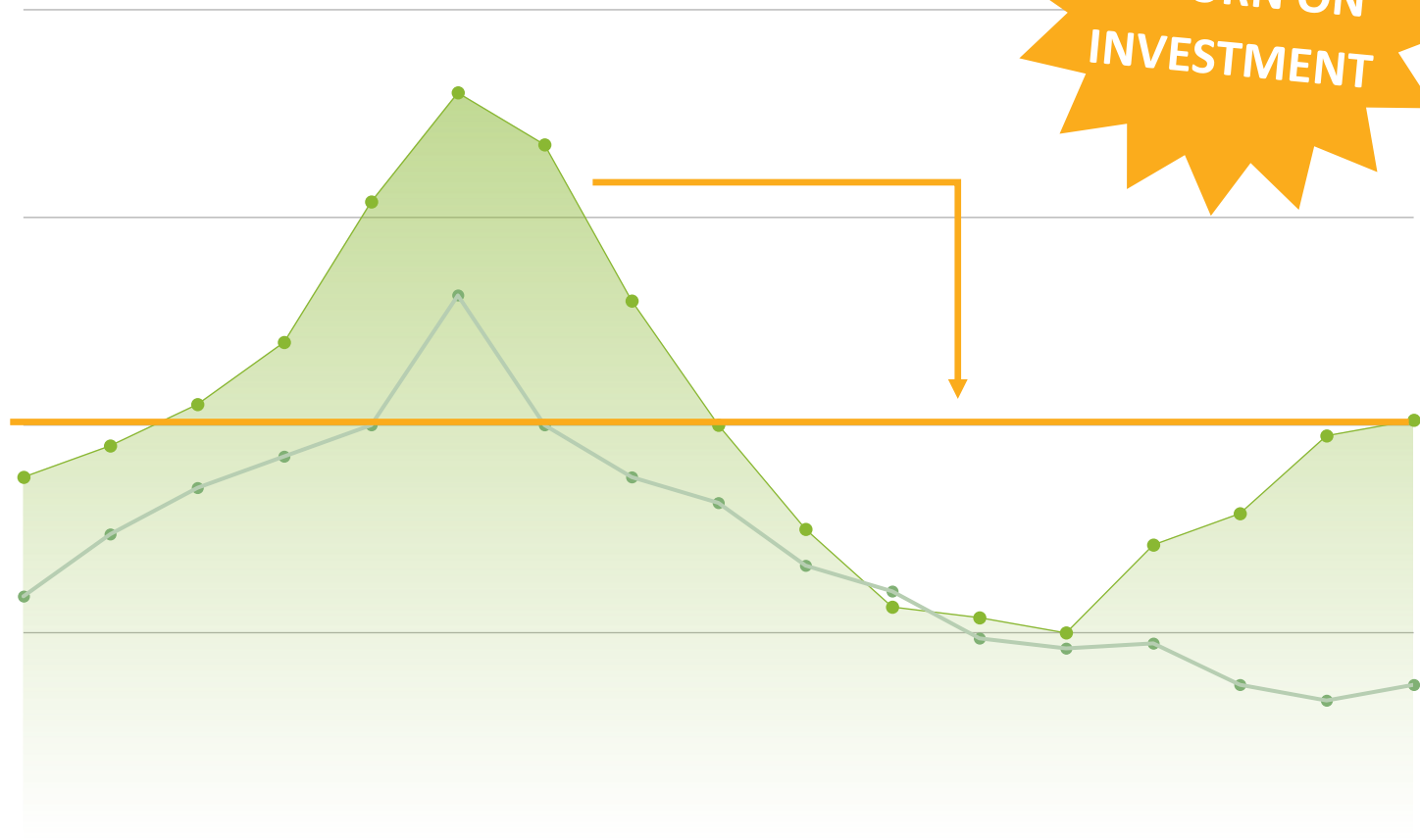
# OPTIMISING CONTRACTED POWER



## PEAK SHAVING

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

**FAST RETURN ON INVESTMENT**



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

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



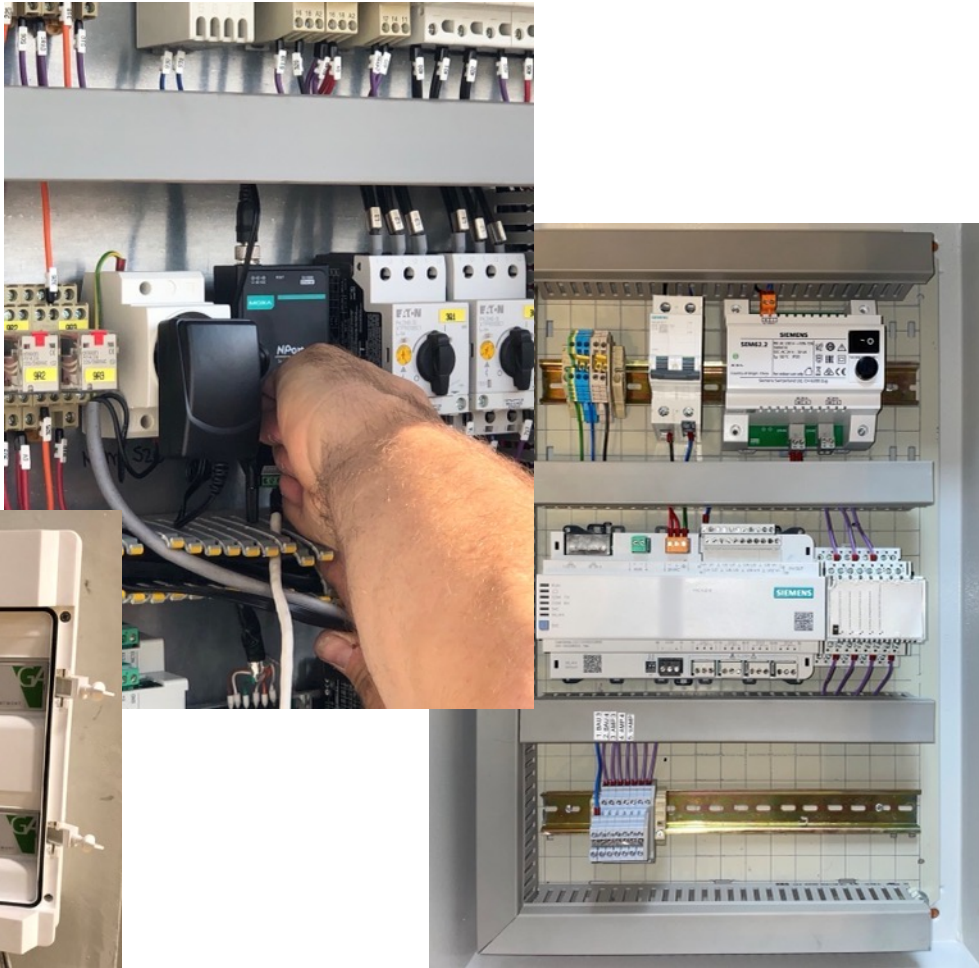
# ELECTRICAL INSTALLATION, PRODUCTION





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## 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/](http://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

**1/2020. (I. 16.) MEKH DECREE – INSTALLATION DEADLINE: 1<sup>ST</sup> 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

## SIEMENS PAC PRODUCT LINE



INDEPENDENT ELECTRICAL EQUIPMENT WITH A RATED POWER EXCEEDING 50 KW

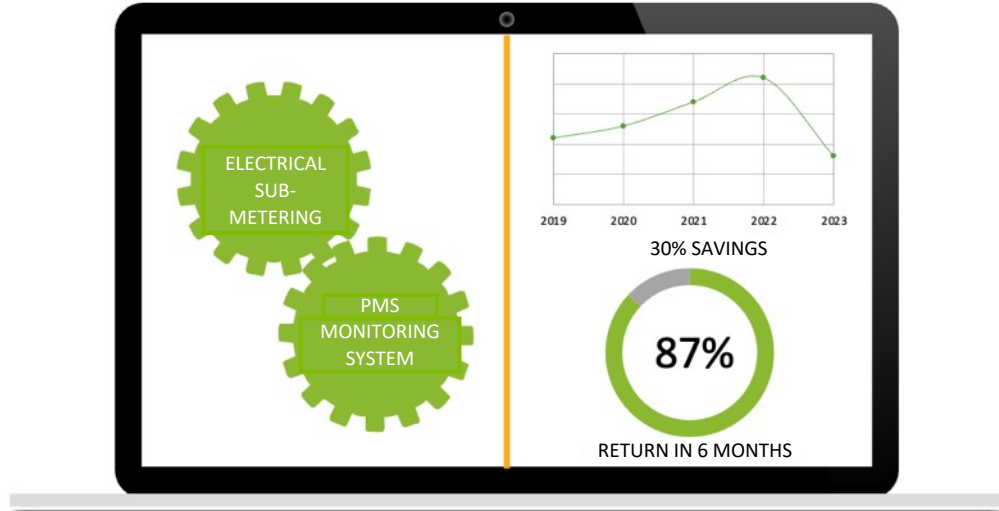


70 KW OR MORE OF RATED ELECTRICAL OUTPUT FOR HEAT GENERATORS AND AIR CONDITIONERS

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# 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

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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



TDK

SIEMENS



Mérnöki Iroda Kft.  
lawand



URBAN PM

MET Invest  
SCHOTT



TRUSTED

COMPLEX TERRITORY IMPLEMENTATION



ELTE  
EÖTVÖS LORÁND  
TUDOMÁNYEGYETEM

RACE TO ZERO

DISCLAIMER

STELLANTIS





# 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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