





**'Reengen** 

Reengen is a global supplier of AI Powered energy & sustainability analytics platform.

We help enterprises to build data driven multi-phased sustainability journey. We coordinate, portfolio-wide energy & sustainability programs based on our Sustainability Cloud that take corporate real estate (CRE) operations from point zero to top of their industry.



in a Nutshell









**Lower Carbon Emissions** 



**Improved Living Environment** 



**Reduced Energy Expenses** 



**Increased Operational Efficiency** 



## **ENERGY & SUSTAINABILITY INTELLIGENCE**





Predictive Maintenance

Energy Management Sustainability Management Utility Bill Management Optimum Energy Procurement

Demand Side Management Asset Management Power Plant Management

















#### REENGEN'S GLOBAL REACH



**15** 



12.000

**Facilities Monitored** 

**5M** 

Real Time Data Stream

0.6

Gigaton CO2 Footprint Reduction

ORACLE











BBVA BNP PARIBAS \*\* QNB \$ Bank Audi Media Markt





























**Cross Industry Solution** with

+ 100 Global Clients

#### **COMPANY TRACTION**



**Commercial Product** Launch

**Local Traction** 

Regional

**Traction** 

2018







11 111 11

CISCO EY

**100th Enterprise Customer UK HQ Office Launch** \$1M ARR **Strategic Partnerships** 



**Academy Spin-off** 

2017

Silicon Valley Experience

**MVP** 

\$500K Pre-Seed Funding



idacapital

**New Product** (Sustainability Intelligence)



\$2.5M Seed & EU Grant Funding

GOLDACRE EDENBASE

**International Expansion** 



Series-A Investment - \$10M **5 New Country Offices** 

New Blockchain enabled **Sustainability Tracing Product** 

#### **Co-Founders**



Sahin Caglayan

Co-Founder,CEO

# IIII SIEMENS



Burak Sefer Co-Founder,COO

IEM



Co-Founder, VP Product & Services

B/S/H/



### **Advisory Board**



Daniel Kranzler Capria Ventures



Stephen Mooney UKTrade & Investment



Faruk Eczacibasi Eczacibasi Holding



Prof. Dr. Prof. Dr. Sermin Onaygil MITU Energy Coloratitute



Prof. M. Pınar Menguc CEEE



Dr. Emre Eren Korkmaz Oxford University



Devrim Celal Upside Energy, UK

#### **Enterprise Machine Learning Applications – No Code ML Models**



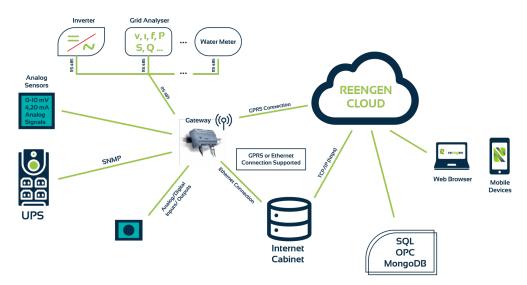


## **TECHNOLOGY**



#### PATENT PENDING EDGE ANALYTICS

### Scalable and replicable communication infrastructure

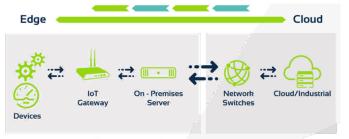


Modbus, IEC6205621, SNMP, BacNet, LoraWAN, NB-IoT, Profibus, 2-Way Communication, Remote Control.. ...

#### **IoT Gateway**

All-In-One Advanced Hub









## SUPERIOR FEEDBACK MECHANISM





Customized – white labeled platform



Real Time Operational Dashboards



**Executive Reporting** 



**Automated & Customized Reporting** 



**In-dept Technical Analysis** 



**Native Mobile Apps** 



## **R&D Focus -Digital Future of Sustainability & Smart Cities**

Big Data Innovative & Disruptive Technologies

Smart Grid Peer to Peer Energy Transaction

Smart Cities Measurement & Verification

Artificial Intelligence Sustainability & Efficiency

IoT & Blockchain Predictive Maintenance

Cloud Computing Energy Gamification

Internet of Energy Demand Response

Sustainability Carbon Intelligence















**SolarPact** 

**EnergyShared** 

## **SOME OF OUR R&D PROJECTS**



**FP7: R2CITIES** - Renovation of Residential urban spaces: Towards nearly zero energy cities

**FP7: CITYFIED** - Replicable and Innovative Future Efficient Districts and cities

FP7: NEED4B - New Energy Efficient Demonstration for Buildings

**Horizon2020: TRIBE** - TRaining Behaviours towards Energy efficiency: Play it!

**EUROGIA2020: Game4SEEN** - Social Impact on Energy Efficiency by Gamification based IoT Platform

**EUROGIA2020: SolarPact** - Smart Algorithms and User Interaction for Residential and Commercial Solar Prosumers

**EUROGIA2020: EnergyShared** - Development of Low-Carbon Residential Microgrid with Advanced Energy Exchange and Payment Capabilities

**H2020: ebalanceplus** - Energy balancing and resilience solutions to unlock the flexibility and increase market options for distribution grid

**ERA-NET GENTE** – Distributed Governance for Green Energy Communities

**EUREKA-TUBITAK 1509** - Multidimensional Energy Monitoring System for Intelligent Buildings

**TUBITAK 1507** - Development of Model Predictive Control Algorithms for optimization of building HVAC Systems

**TUBITAK 1511** - Integrated Energy Management Platform for Commercial Buildings including Wireless Sensors and IoT Gateways Edge Analytics

**TUBITAK 1501** - Cloud and Edge Analytics Integrated IIoT-Based Predictive Maintenance Platform for Electric Motors in Industrial Facilities



## **EUROGIA: GAME4SEEN**



## Social Impact on Energy Efficiency by Gamification based IoT Platform











Kullanıcı Tipleri	00:00- 03:00	03:00- 06:00	06:00- 09:00	09:00- 12:00	12:00- 15:00	15:00- 18:00	18:00-21:00	21:00-24:00
А				Ď:				
В				Ŏ	Ď,	<u>a</u> a		
С							<u> </u>	
D								



Kullanıcı Tipleri	00:00- 03:00	03:00- 06:00	06:00- 09:00	09:00- 12:00	12:00- 15:00	15:00- 18:00	18:00-21:00	21:00-24:00
A			.0	Č	ă <b>a</b>	<u>a</u>		Ď.
В			<u> </u>	Ď.	Ŏ,			
С	.0		<u></u>				<b>a</b>	
D	•							

The aim of Game4SEEN Project is to develop an innovative ICT platform adopting customized gamification techniques for increased citizen engagement in order to achieve the behavioural change of individuals on energy usage. Energy efficiency and social impact approach are used here.

## **EUROGIA: SOLARPACT**



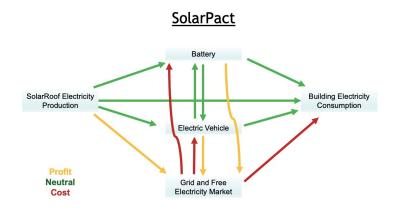
#### Smart Algorithms and User Interaction for Residential and Commercial Solar Prosumers











The goal of the SolarPact project is developing and demonstrating advanced algorithms and software applications for solar prosumers, smart scheduling of local production and consumption via algorithms and user interaction for both the commercial and residential sectors. Renewable energy management knowledge will be transferred.

## **EUROGIA: ENERGYSHARED**



Development of Low-Carbon Residential Microgrid with Advanced Energy Exchange and Payment Capabilities







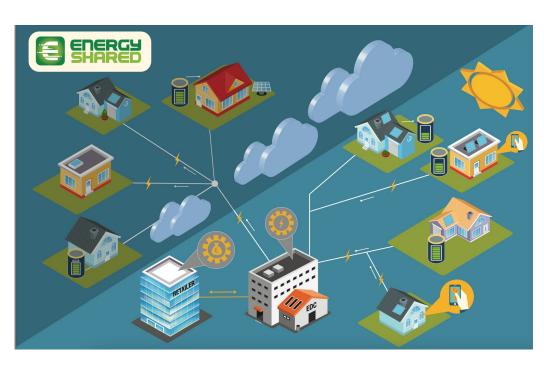




EnergyShared project aims to develop renewable energy solution based smart infrastructure by placing individuals in the core of this smart infrastructure, from energy production to storage, efficient energy use to selling, energy demand management to sharing, and monitoring to control.

#### **EnergyShared will bring together the following tools:**

- Mobile Software Development Kit (SDK)
- Smart Box for houses
- Predictive Energy Management tools for microgrids
- Distributed Management System for utilities
- IoT System









## **ADDRESSING THIS CALL**



EUROGIA2030

THE EUREKA CLUSTER FOR LOW CARBON TECHNOLOGIES SOLUTIONS

**OPEN NOW: CALL19 (18TH FEBRUARY 2022)** 

#### **Eurogia 2030s 5D Strategy:**

- Decarbonisation
- Democratisation
- Digitalisation
- Deregulation
- Decentralisation

## **REENGEN'S PROJECT OFFERS**

- 1. Integrated and Digital Carbon Emission Analytics and Net Zero Navigation Platform
- Scope 1,2,3 Accounting, Science-based targets
- Achieving Net zero goals
- 2. IoT&AI based multi-layered Virtual Power Plant Platform for Demand Side Management Microservices
- Distributed/Decentralized Energy Resources Management
- Mobile app interfaces for user engagement
- Microservices for DSO-users

# Thank you!



#### REENGEN ENERGY TECHNOLOGIES CORP.

TR: Reşitpaşa Mah. Katar Cad. İTÜ Teknokent Arı 3 B110 Sarıyer, İstanbul

USA: Singularity University Lab NASA Ames Research Moffett Field 94035 Mountain View, CA

Contact us! info@reengen.com







/reengen

www.reengen.com

## **SOLUTION**



## **Energy AI & IoT Platform**

**Cloud-based End-to-end Energy Intelligence Solutions for Buildings, Facilities and Utilities** 

Turns Data into Actionable Intelligence

Track the real time condition of your energy assets, monitor energy performance of your buildings, systems and renewable energy plants and obtain data-driven notifications from anywhere and anytime you need.

























# As an expert on the studies of DIGITALIZATION, SMART, IOT, ENERGY, SUSTAINABILITY, DATA ANALYTICS

## **OUR R&D PROJECT IDEAS FOR FUTURE**

- Integrated and Digital Carbon Footprint & Sustainability Management
- ML Predictive Maintenance Services for Al-based Energy Analytics
- Blockchain-based microgrid optimization
- Smart and Sustainable Energy Transition of Prosumers
- Wireless sensor network-based demand response platform
- Al-powered chatbot based utility customer engagement portal
- IoT Monitoring and Gamification based End User Behavior Enhancement for Energy Efficiency
- Big Data for Energy Efficiency
- Gamification supported customer engagement for demand side
- Platform-as-a-Service Application Marketplace for Smart Cities
- LoRaWAN & NB-IoT hybrid network based smart sensor platform
- Solar Plant Supply Side Management & Real Time Control
- Renewables integrated Smart Grid optimization



AND MANY MORE....
CONTACT US FOR DETAILS!