



SMARTH-PROP

A self-learning and self-adjusting smart thermostat system based on Artificial Intelligence

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Pitch Deck 2021



Innovative solutions for Smart Cities



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Buildings consume > 1/3 of energy in EU



Up to **50% savings**

demonstrated with automation*:

shopping centers 49%

offices 39%

schools/universities 34%

restaurants 31%

residential 27%

hotels 25%

hospitals 18%

35 – 70%

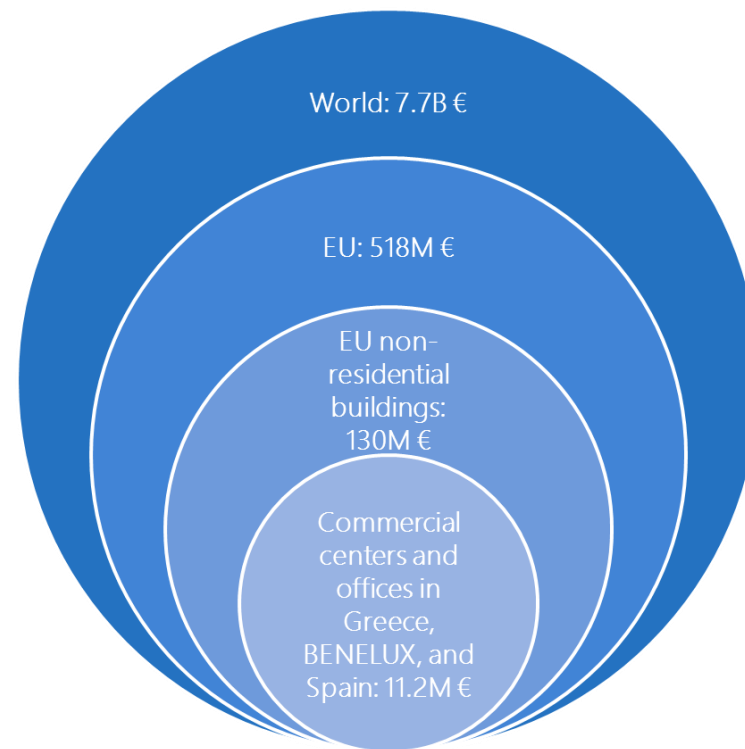
of building energy goes to
heating / cooling systems

**lighting, heating, cooling, etc.*



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26% CAGR to €7.7 B ('26) for smart thermostats globally

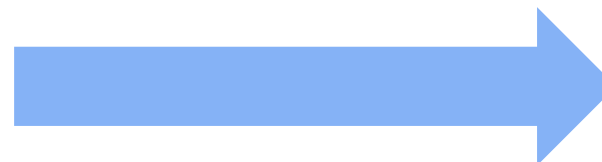


- Current smart thermostats
 - Inefficient or expensive or both
- Limited intelligence
 - Remote/WiFi commands
 - Manual entry
 - Limited inputs

The first **self-learning** and **self-adjusting** thermostat

Artificial Intelligence &
Model Predictive Control

Learns occupants' preferences



Energy savings

up to **40%**



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Patent Pending, (Sep. 2020)
(EPO – 203860043-2)



Europäisches
Patentamt
European
Patent Office
Office européen
des brevets

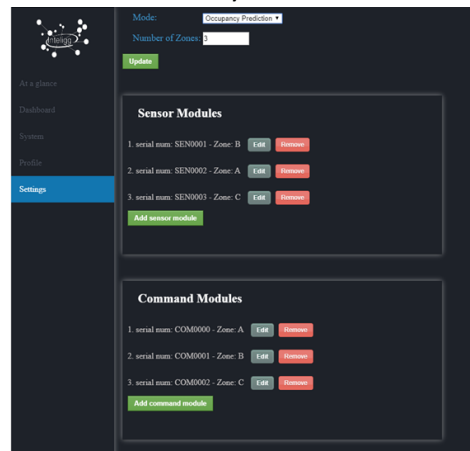
... and its cloud platform



a)



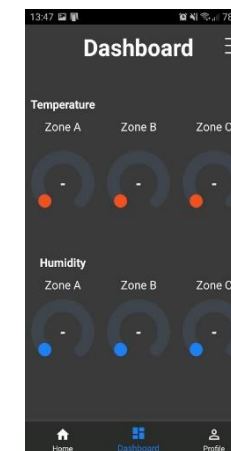
b)



c)



d)

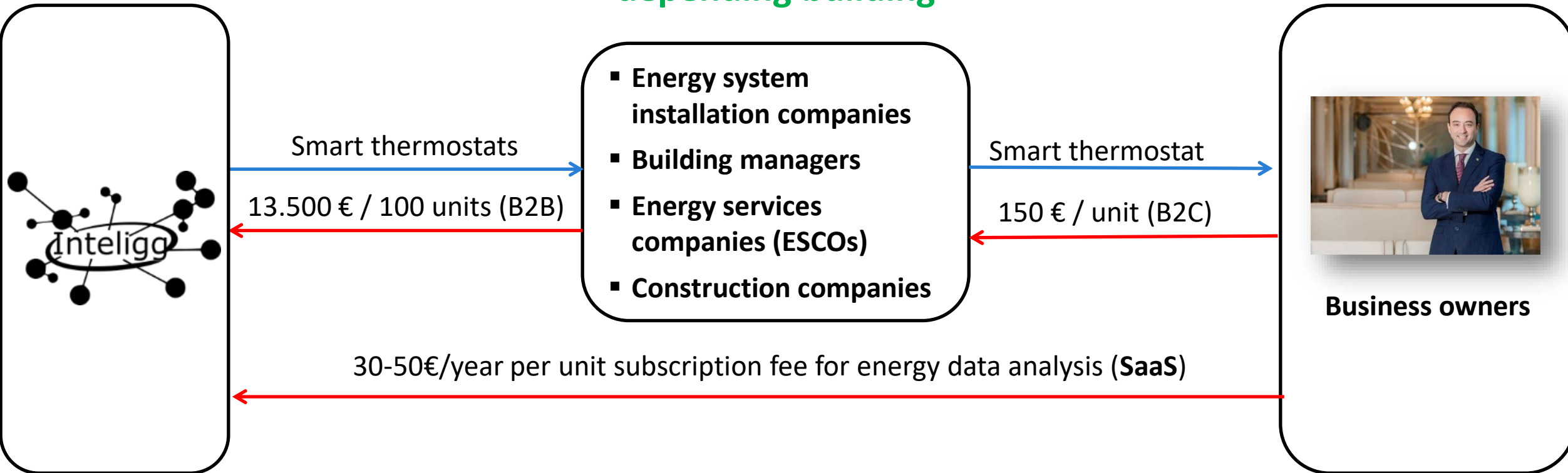


e)

The cloud platform for SMARTHPROP thermostat: a) zonal monitoring, b) system monitoring, c) partitioning in buildings, d) mobile app for zonal control, e) mobile app for real time monitoring

Our Business Model (B2B2C)

**S.P.P. = 3-9 months
depending building**



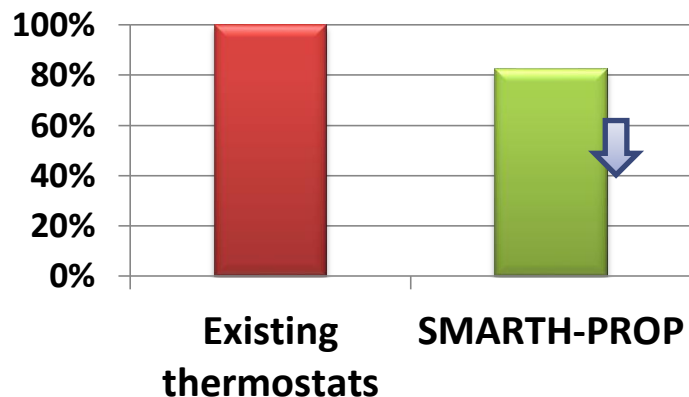


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Lower installation costs come with higher energy savings and less CO₂ emissions (Green Deal objectives)

For our customers

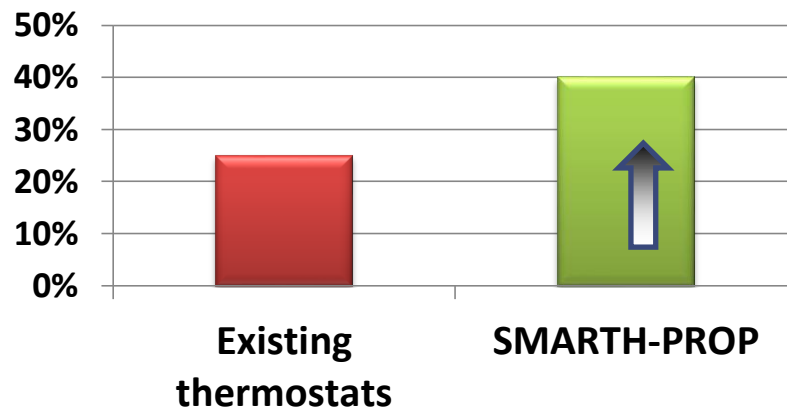
Lower installation costs



Up to 25%

For the end-users

Energy savings



Up to 40%

Energy consumption of commercial centres and offices for HVAC in Greece, BENELUX, and Spain





64 TWh

**We can save
8.1 TWh
of energy per year**



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Affordable energy efficiency for buildings

	Energy savings up to 40%	< ~150€ price point	Self-learning & self-adjusting	Zone management	With/out Devices
 SMARTH-PROP	✓	✓	✓	✓	✓
 Nest	✗	✗	✗	✗	✗
	✓	✗	✗	✓	✗
Honeywell	✗	✓	✗	✗	✗
 EMERSON	✗	✓	✗	✓	✗
tado°	✗	✗	✓	✓	✗



Pilots in 4 countries: Luxembourg (Completed-Contracted), Belgium (Completed-Contracted), Spain (2 Completed), Greece (4 Completed-Contracted)

Greek Orthodox Church, St. Nicolas, (Weiler-la-Tour, **Luxemburg -client**)

2-floors building, Total Surface area: 750 m²

TOWN HALL (Thermi, **Greece-client**)

3-floors building, Total Surface area: 503,3 m²

Residential Building (Agia Paraskevi, **Greece-client**)

3-floors building, Total Surface area: 209 m²

Residential Apartment (Thermi, **Greece-client**)

1-floor building, Total Surface area: 115 m²

Offices Building (Athens, **Greece-in talks**)

3-floor building, Total Surface area: 1015 m²

CIVIVOX ITURRAMA (Pamplona, **Spain-in talks**)

2-floors building, Total Surface area: 4,500 m²

OMEGA Group Spri, (La Louviere, **Belgium-client**)

Single floor Industrial building Total Surface area: 125 m²

1st Pre-order of 300,000€ (1000 Units) for
Installation & Maintenance
(Hardware/Software) on 72 Public Buildings
in a Greek Municipality (ELECTRA National
Call, 2021-Total **Surface Area: 34,857m²**)



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25.000 units in 6 (or more) countries by 2023

2022

- Launch product
- Sign 2 – 4 B2B contracts
- Establish in GR
- Seed/Seed Round A Funding

2023

- Sign strategic partnerships
- Sign 10 – 15 B2B contracts
- Expand in EU

2024

- Scale-up sales
- Achieve breakeven
- Expand worldwide
- Seed Round A/B Funding

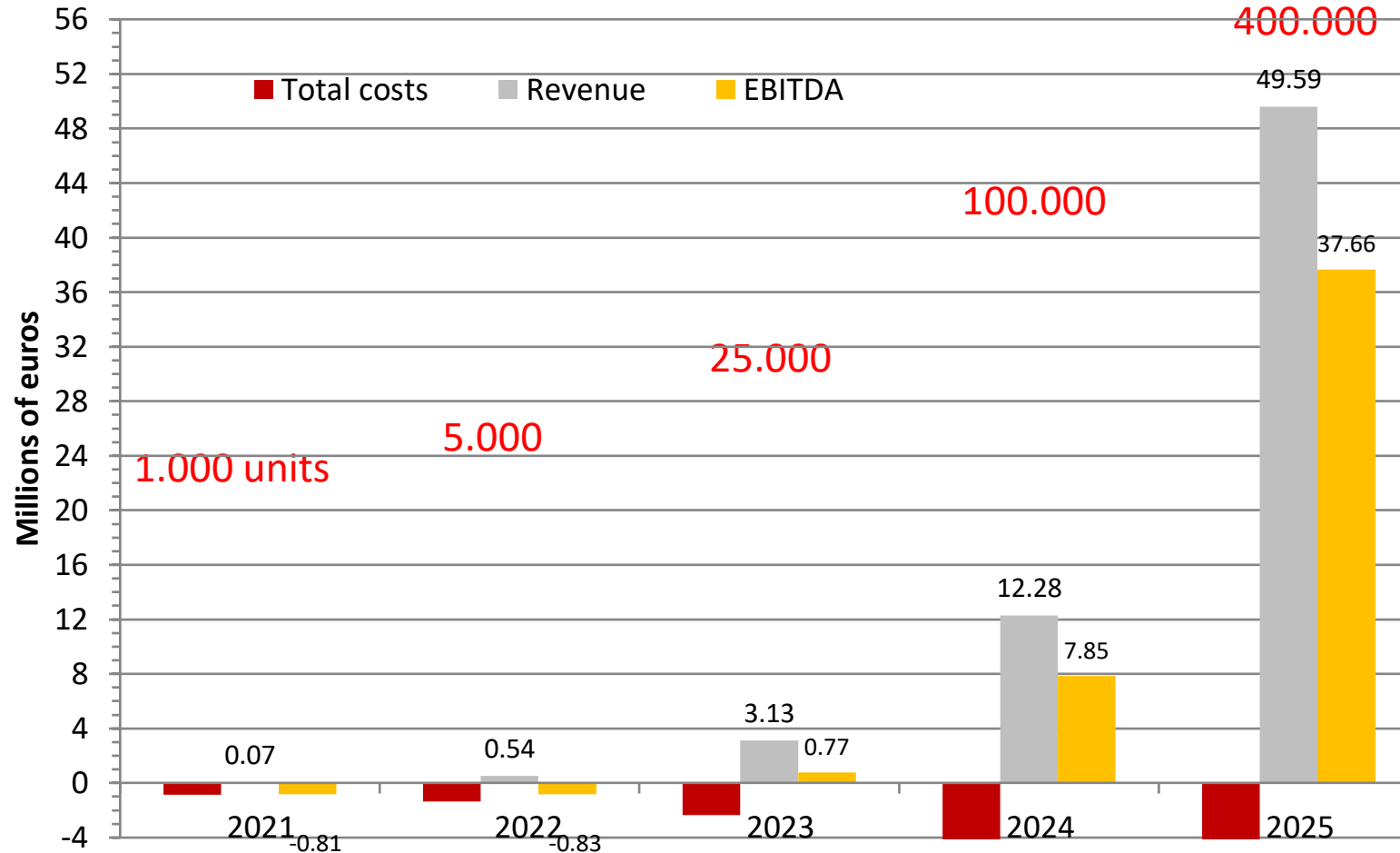
Present Strategic Partnerships:

- Omega Group Sprl (Belgium) as customer and product distributor in BENELUX countries

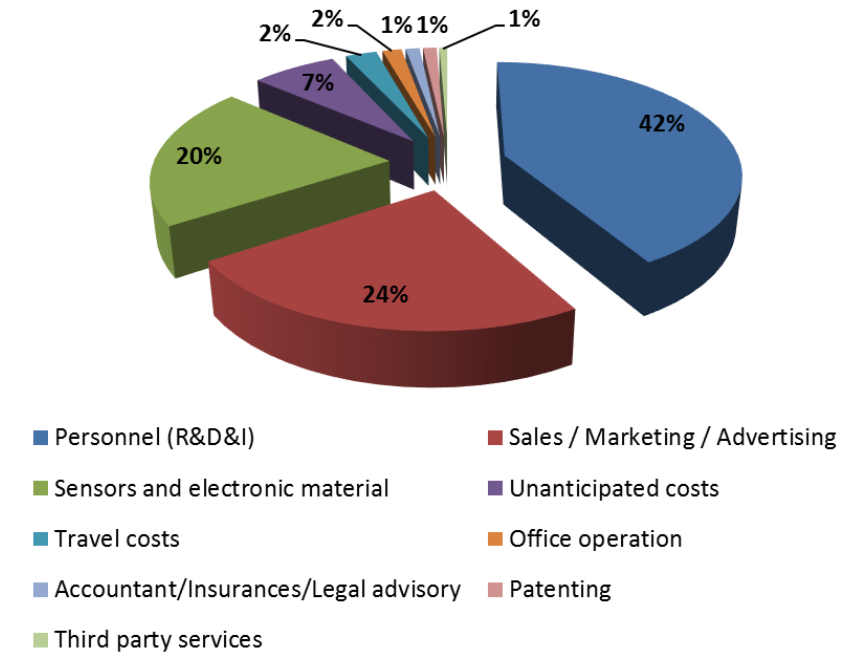
Target companies-customers:

- Greece: KAFKAS S.A, Hellenic Petroleum, ZeniΘ, Protergia, HERON, GEK TERNA
- BENELUX: Eneco, Lampiris, Luminus, ENGIE
- Spain, France, Germany, Mexico: Iberdrola, Endesa, Schneider Electric, Aleatica, etc

Breakeven in 2023



Use of funds



Funding requested

€ 850,000 for 12 months duration

Break-even at 3rd financial year



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Selected Achievements



Article
Use of AI Algorithms in Different Building Typologies for Energy Efficiency towards Smart Buildings

Ali Bagheri ¹, Konstantinos N. Genikomsakis ¹, Sesil Koutra ², Vasileios Sakellariou ¹, and Christos S. Ioakimidis ^{3,4}



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Team and founders' vision (+3 members Part-time)



Dr. Christos Ioakeimidis
CEO/Co-founder

- Dipl.-Ing. Mechanical Eng.
- MSc Mech. & Aerospace Eng.
- MBA Financial Eng.
- PhD Mechanical & Chemical Eng.
- 27 years research and industrial experience
- 56 projects (total funding 17.5M)



Dr. Konstantinos Genikomsakis
CTO/Co-founder

- Dipl.-Ing. Electrical & Computer Eng.
- MSc Systems Eng. & Mgmt.
- PhD Production Eng. & Mgmt.
- 17 years research experience
- 15 projects

To reduce energy consumption in buildings by up to 40%



Dr. Ali Bagheri
Software-Hardware Developer

- BSc in Mechanical Eng.
- MSc in Energy Eng.
- PhD in Applied Sciences
- 7 years research and industrial experience



Vasileios Sakellariou
Software Developer/Data Analyst

- MSc in Electrical Eng. & Computer Science
- PhD in Electrical Eng.
- Member of Greek National Informatics team since 2012
- IT platforms development experience

To become a global player in Smart Cities solutions by 2025

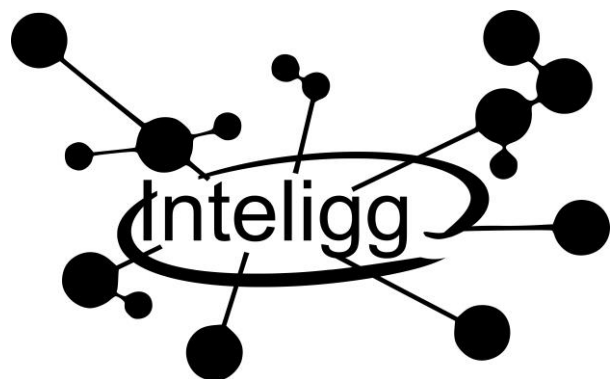
To expand in 6 and more countries by 2023

Our dream



SMARTH-PROP

The company at a glance



Advisors



The company

Inteligg **develops products, provides services and engages in research** in the fields of energy, transport and environment

Status

Founded in 2018
Based in Athens, Greece

Team: 2 co-founders,
4 team members, 3 part-time members, 3 advisors
(uni.fund VC (GR), Domius Capital
Advisors LLP (U.K.), Brookstreet Equity
Partners LLP (U.K.))

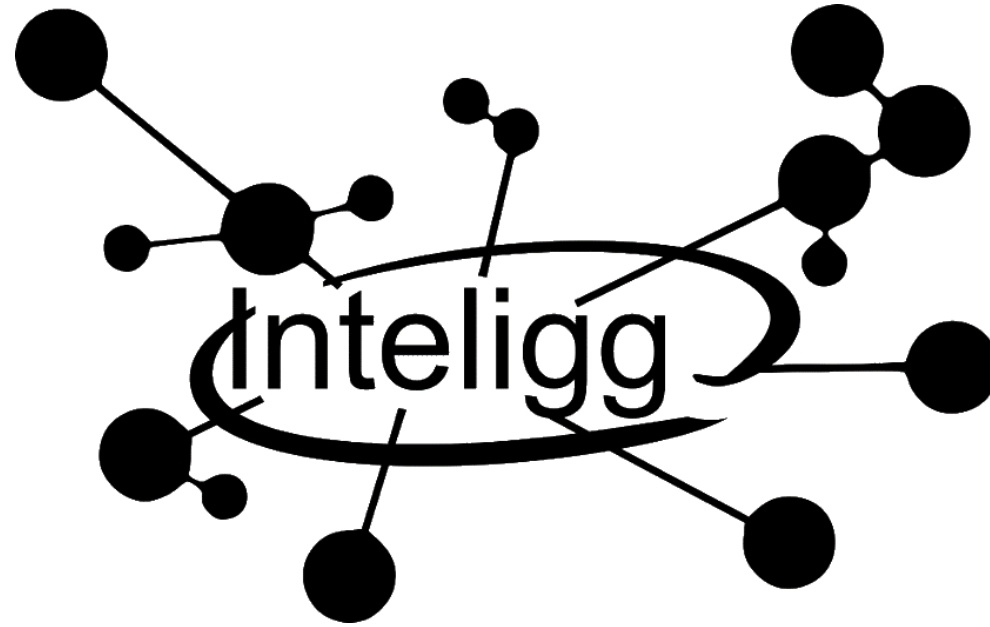
Other key achievements

Seal of Excellence (EU SME Instrument 1):
“PETIT - PErsonalised soluTion for aIr qualiTy monitoring”

IP4SME – Patent Funding from EU (3 times)

EU H2020 project “E-DRIVETOUR - bEyonD the boRder of electrIc VEHICLES: an advanced inTeractive cOURse”

OI2LAB – “D-WEAR, Design of a Wearable Electronic gadget for Air quality monitoring”



Thank you!

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