



InnoEnergy European Entrepreneurs – Energy Innovation for the industry and utilities

Achaz v. Arnim, Senior Business Development

Hall 27, booth N30/1,
EnergyEfficiencyCenter
27 Apr. 2017, 02:00 - 04:00 PM

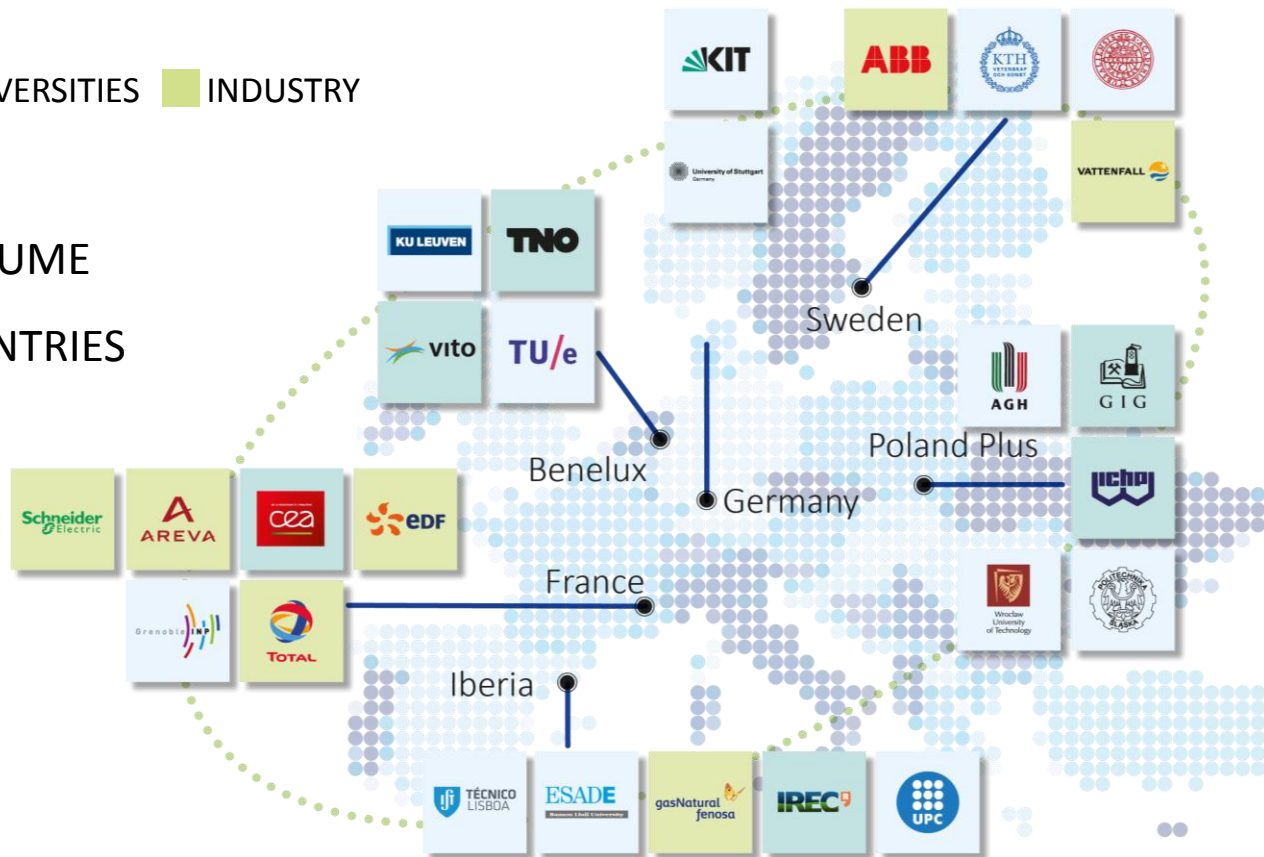
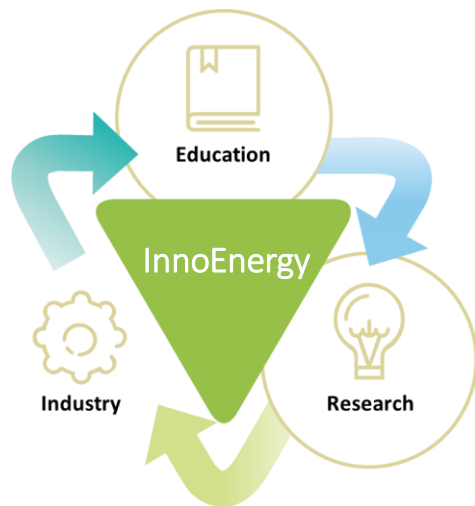
27 SHAREHOLDERS End 2016

RESEARCH INSTITUTES UNIVERSITIES INDUSTRY

6 CO-LOCATION CENTRES

>300 MIO € BUSINESS VOLUME

>300 PARTNERS in 19 COUNTRIES





Prof. Tomasz Barszcz
CEO, ECS AMC



Michal Blas
Business Operations
Counsellor, InnoEnergy CC
Poland Plus Sp. z o.o.



Dr. André Ditttrich
Head of Industry, ci-tec
GmbH



Carlos Pina Teixeira
Eneida



MBA Thomas Blibette
export manager, DCbrain



Achaz von Arnim
Senior Business
Development, KIC
InnoEnergy Germany GmbH

Agenda

Hall 27, booth N30/1, EnergyEfficiencyCenter

27 Apr. 2017, 02:00 - 04:00 PM

Time	Topics	Company	Speaker	Country
14:00 - 14:20	InnoEnergy European startups	InnoEnergy	Achaz v. Arnim	GER
14:20 - 14:40	How to increase availability and reduce operational expenses with quick and easy wireless condition monitoring incl. Q&A	AMC	Tomasz Barszcz	POL
14:40 - 15:00	Smart Meter Plug reading all kinds of Smart Meters Utility usage at one glance incl. Q&A	Smart Meter	Michal Bias	POL
15:00 - 15:20	Project COMFEB - increase the usage of alternative fuels in cement production	Ci-Tec	Dr. André Dittrich	GER
15:20 - 15:40	DeepGrid®: a Collaborative Energy IIoT Platform for the Optimization of the Electric Grid incl. Q&A	Eneida	Carlos Pina Teixeira	POR
15:40 - 16:00	Deep learning and graph for in-depth optimization of industrial flow networks incl. Q&A	DCBrain	Thomas Bibette	FRA

Increasing reliability and safety of power plants

Challenge

- Safety and efficiency of power generation equipment requires a wide variety of information from sensors, several thousand for a single power plant unit
- For remote assets high cost of installation, power supply, cabling prevents owners from investing in additional information

Solution

- Provide an easy way to obtain critical data transformed into significant information on the technical state
- Product line of wireless sensors: vibration, universal to make any sensor wireless
- Sending output information to state off the art DCS/ SCADA systems

Value Proposition

- Vibration sensor can detect and identify the problem
- Sub-GHz wireless module with range much better than 2.4 GHz
- Battery life over 5 years
- Gateway supporting open protocols (OPC, MODBUS)
- Cost efficient solution for receiving relevant datas remotely

AMC VIBRO SENSOR



<http://www.amcvibro.pl>

Solution available: **Today**

Insights that anticipate customers' needs

Challenge

- No clear smart metering benefits for end-user
- Information splitted between different interfaces
- Decreasing margins from energy sale
- Advanced energy peak management

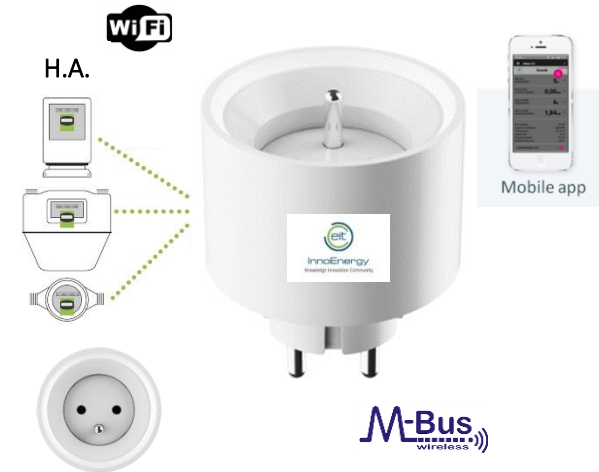
Solution

- One-shop interface to read on-line all kinds of smart meters
- Enables remote energy management
- Allow access to best available momentum tariffs
- Customer behavior patterns through big data analytics

Value Proposition

- Direct communication channel through the app / push
- Tailor made products through the Big Data analysis to end customers, cross sell opportunities
- Device for flattering energy usage & control end-user devices

Smart Meters Plug



<http://www.innoenergy.com/s-marthomesolutions>

Solution available: Q4/17

Reduce costs and increase quality – based on intelligent process control

Challenge

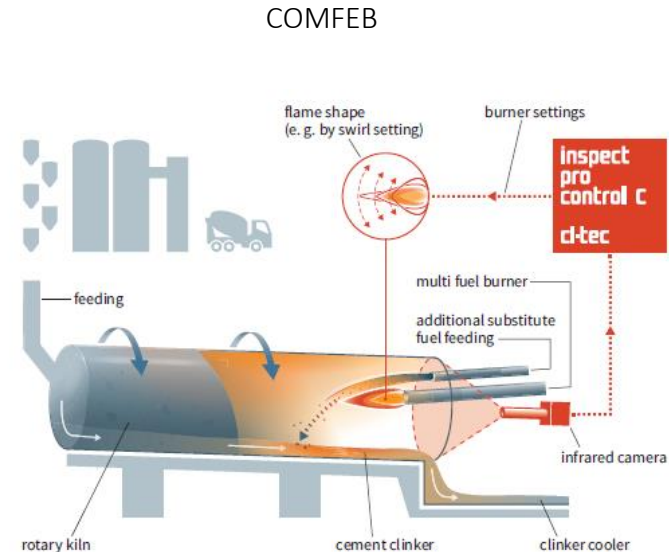
- So-called multi-fuel burners are employed in thermal processes like the cement industry
- Solid recovered fuels (SRF) replace fossil fuels in order to reduce energy cost
- SRF affect incineration process and product quality

Solution

- Patented infrared technology and control system
- Improve quality and reduce maintenance cost by
 - exact control of temperature
 - early detection of unburned fuel
 - stable production process

Value Proposition

- Reduce energy cost and CO₂
- Replace 20% coal by SRF and 5% brown coal by biomass
- Energy saving 320 t€/ year
- Rol: 12 month



Solution available: **Today**

<http://www.ci-tec.de>

Collaborative Energy IoT Platform to deploy a cyber-secure LV Smart Grid

Challenge

- Asset, engineering and maintenance managers are facing:
 - ageing infrastructure
 - increased penetration of Renewables and EV
 - growing demand of electricity
- leading to higher OPEX and increasing risk of failure

Solution

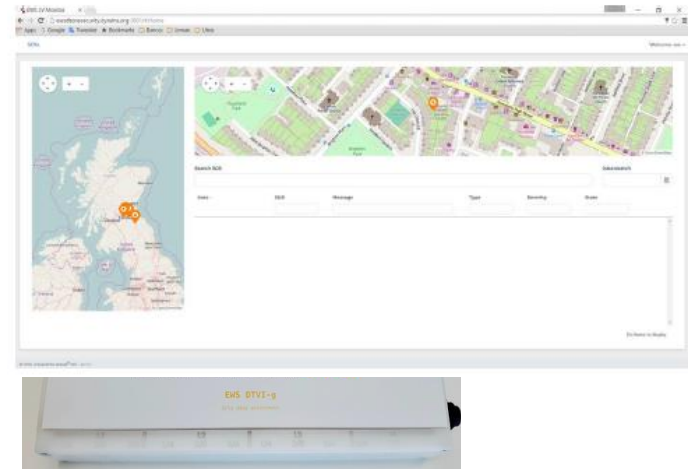
Main issues of LV Networks covered by the DeepGrid ®

- Wireless smart sensor suite of specially designed, low cost, low power, easy to install “live”
- IEC security audited – ISO 27000
- Collaborative Software with specific Machine Learning Algorithms leading to lower OPEX and CAPEX

Value Proposition

- Improve Asset Productivity: Do More with Less;
- Increase Efficiency, QoS, and Security & Safety, Reduce Risk;
- Allow Higher Penetration of Renewables, Electric Vehicles, Distributed Energy Resources;
- Improve decision making through a continuous learning process.

DeepGrid ®



ENEIDA.IO

<http://www.eneida.io>

Solution available: **Today**

Hydraulic microturbines for generating electricity

Challenge

- Need to reduce the costs of water extraction and distribution due to increasingly high electricity bills
- Need to reduce the pressure in the water supply in order to increase the energy efficiency of the process

Solution

- Electronically-controlled regenerative turbine.
- Able to adapt its operation to the hydraulic conditions available

Value Proposition

- Work in different control modes
- The system proves a very attractive investment for clients, with a payback of 4 - 5 years
- Clients receive a direct income for the remaining 20 years of product life

Tecnoturbines

Video Link: <https://www.youtube.com/watch?v=wGrH6GU-nPY>



<http://tecnoturbines.com/>

Solution available: **today**

Enable large manufacturers to turn available raw IIoT* data into new energy savings opportunities

Challenge

- How to improve energy performance with millions of data but no time for building up analytics in every day rush?!

Solution

- totally new experience for energy analytics, with strongly intuitive design and unique premium features: real time live costs, predictive analytics, factors of influence detection, timeline with personalized threads, smart automated alerts, ISO 50001 action plan, etc

Value Proposition

- 20% of energy savings without Capex
- Monitoring: Understand & analyze rapidly the energy consumption (water, gaz, electricity, etc.) according to production and maintenance conditions
- Diagnostic: Identify energy savings opportunities, thanks to algorithms continuously analysing your plant's parameters
- Management: Action plans, constantly updated for operational managers and deciders

energyency

Video Link: <https://youtu.be/3ykP8Zwrgbq>

energyency

energy intelligence for manufacturing



energyency

<http://www.energyency.com/>

Solution available: *Today*

Use available data to optimize your network exploitation processes

Challenge

- Network managers need to balance their flows in order to secure their networks, optimize OPEX and new investments
- Installed SCADAs network systems are still managing risks through alerting and not optimizing flows through prediction

Solution

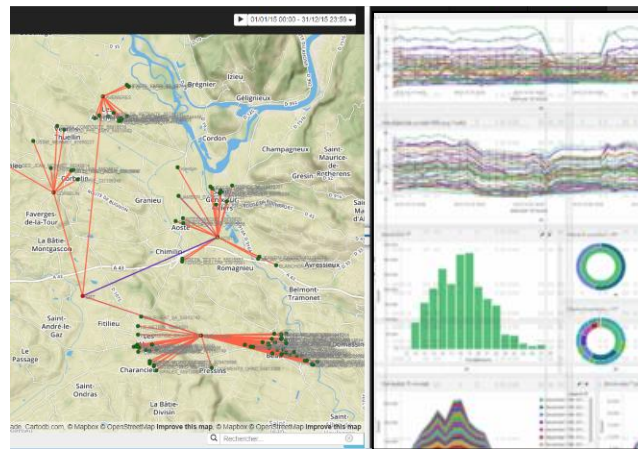
- Deep Flow Engine identifies and predicts anomalies in the network, to run diagnosis and assess impacts
- Deep Flow Engine uses Artificial Intelligence with graph database for a smart network management

Value Proposition

- Exhaustive: addressing all issues of an exploitation or engineering department: Flow tracking, maintenance optimization, simulation, modelling
- Easy to use: a big data tool dedicated to exploitation / engineering teams, no need to hire data-scientist
- Flow dedicated and data driven: based on reality, from raw data to a digital model of your network in just two weeks

Deep Flow Engine©

Video Link: <https://www.youtube.com/watch?v=FlyqV8x1BGI>



Solution available: today

<http://www.dcbbrain.com>

We go into the UNKNOWN with YOU to bring THE NEW ALIVE



ARE YOU CURIOUS TO TRY THIS WAY?

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www.oneinonethree.com

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