QUYOS / Quantum Solar Concentrator as a new Solar Energy device

Thematic (Energy Source –EE & EC) brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

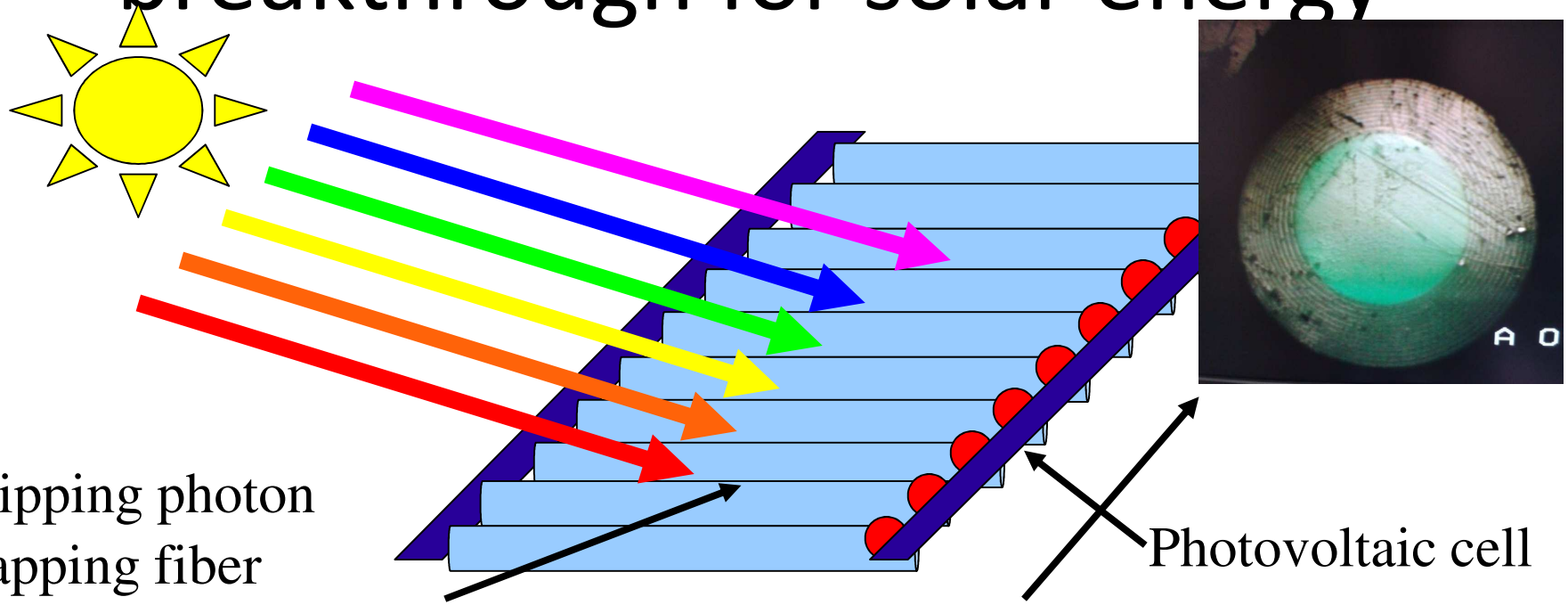
Paris, 21st June 2018

A new solar technology coming from fundamental research

- From the design of a neutrino detector to a revolutionnary concept of solar panel, a new high-technology for solar energy is born in the Particles Physics labs of CEA Saclay
- Skills and expertise : Photonic Crystal Fiber, Fluorescent plastic fiber, photon trapping, photovoltaïc energy
- Project not yet EU-funded

Thematic (Energy Source –EE & EC-) brokerage workshops

a Technological and economical breakthrough for solar energy



Solar pannel with quantum concentrator

Very Low Cost and high efficiency solar pannel

99% Plastic 1% Silicon

Consortium (not yet)

Known partners / Competence offer			
Name	**Type**	**Country**	**Role in the project**
CEA		France	R&D before spin-off creation
Partner search			
Profile	**Type**	**Country**	**Role in the project**
R&D			Research photovoltaic, quantum dots, plastics fiber drawing
Investors			Technology promotion
			Thematic (Energy Source –EE & EC-) brokerage workshops

Contact details

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Supraconductivity to Industry/ From wire production to the devices

Adressed topic in working programme

Thematic (Industry & services –EE & SPIRE- Energy Source –EE & EC- Policy –EE-)

brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

Consortium University of Nancy, SME SuperOx Europe & Absolut System

- Consortium made of 3 entity working of the full chain of superconductivity. From production of the wire, to characterization and development, to additional technological brick.
- SuperOx Europe : producer of 2G HTS supraconductor wire and developer of devices (SFCL, cable, motors)
- Laboratoire GREEN, Nancy : specialized in characterization of devices made with superconductivity wire
- Absolut System, specialist in cryogenics to superconductivity devices
- Past experience : ASUMED (SuperOx)

Our project idea / expertise

- By today, superconductivity is known as one of the technology for the future, listed in most of roadmaps.
- To mature the technology, it looks like there are needs for ready to study and promote it.
- We are looking for interested to pass into R&D mode for ready to use solutions.
  - Potential is in grid (smart and more efficient), industry, devices (electric transportation).

Consortium

Known partners / Competence offer			
Name	**Type**	**Country**	**Role in the project**
GREEN Nancy	Univ	F	Characterisation and Academic validation
Absolut System	SME	F	Specialist in cryogenics for superconduct.
Partner search			
Profile	**Type**	**Country**	**Role in the project**
Any		Any	End User – potential partner to develop the technology into real industry

Contact details

Contact person	Cédric ETLICHER
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Adress	Technoparc des Florides, Ilot Carmin, 13700 MARIGNANE
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E-mail	c.etlicher@superox.eu

Energy efficiency practicioners

Expertise

Looking for partners

Project

EE13 - Next-generation of smart energy services
EE2 - Integrated home renovation services
EE8 - Implementation of energy audits

Topics

Les 7 Vents

Who we are

" Utility cooperative of sustainable energy and development

- Skills and expertise
  - Since 1998, +50 000 contacts directly impacted by our **free energy advices and information** to individuals #PublicService
  - +200 companies and public bodies supported towards **energy transition and sustainable living modes** #Consultancy
- EU-funded projects / pilot projects
  - 7 successful, 2 running (leading 1)
  - Local energy agency, demonstrative photovoltaics & fuel cells, anaerobic digestion, NZEB, positive energy buildings, ecobuilding… #InnovationLab

FRANCE

ID / Profile

- Not-for-profit SME
- Energy agency or eq.
- 10 employees
- From Normandy

Thematic (Buildings - EE & EEB - Industry & services – EE & SPIRE-Energy Source –EE & EC) brokerage workshops

Enhance our efficiency… …in energy efficiency!

Our project idea / expertise

Description of our project ideas (content and why you expect it to be successful)	Description of what we… …could bring (offer to other proposals)	…would take (request from partners)
1. To capitalize on new models of services #EE13	Context to implement 2 new services (already identified at partners')	Experience of successful services wishing to upscale + good will
2. To support moves into action of renovators #EE2	Feedbacks on 2 types of renovation services (already run by us)	Feedbacks on other kinds of renovation services + policy scientists
3. To empower SMEs for energy audits #EE8	Transnational experience about energy audits in SMEs	Connectivity to networks of SMEs + pedagogical engineering

Thematic (Buildings - EE & EEB - Industry & services – EE & SPIRE-Energy Source –EE & EC) brokerage workshops

No consortium (yet!)

Known partners / Competence offer

We could recommend some of the partners we trust through our past or current partnerships

We are looking for serious fun. Expected high level work and happyness ☺

Partner search

Profile	Type	Country	Role in the project
EE13 - Energy service providers	Any	Any	To deploy an integrated model
EE2 - Org. close to homeowners	Any	Any	To support efficient renovations
EE8 - SMEs' capacity builders	Any	Any	To go beyond energy audits

Contact details

les 7 Vents
La coopérative
de l'énergie et du développement durable

Florian GUILLOTTE
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Europe et Innovation

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conseil • études • ingéniérie
consulting • research • engineering

Développer - *Develop*
Energies renouvelables *Renewable energies*
Eco-construction *Eco-buildings*

Accompagner - *Accompany*
Territoires & innovations *Fields and innovations*
Développement durable *Sustainable development*

Innover - *Innovate*
Projets de coopération *Cooperation projects*
Intelligence collective *Collective intelligence*

www.7vents.fr

QUALIBAT L'INGÉNIERIE QUALIFIÉE

On-Power

Organisations' Network Pursuing the Work on EneRgy poverty

Energy Source –EE & EC

Workshops EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

Fondation Agir Contre l'Exclusion

- Created in 1993 by **15 big enterprises**, FACE is a **French public utility Foundation** and **network of 5650 companies preventing and fighting against all types of exclusion, discrimination and poverty**. FACE bases its action on a **territorial approach** to **social and societal innovation**, promoting **new business practices** and **fostering proximity** with **local actors**.

23 years of experience

Think, Do & Share Tank

66 local structures

5 400 partner companies

200 000 annual beneficiairies

474 collaborators

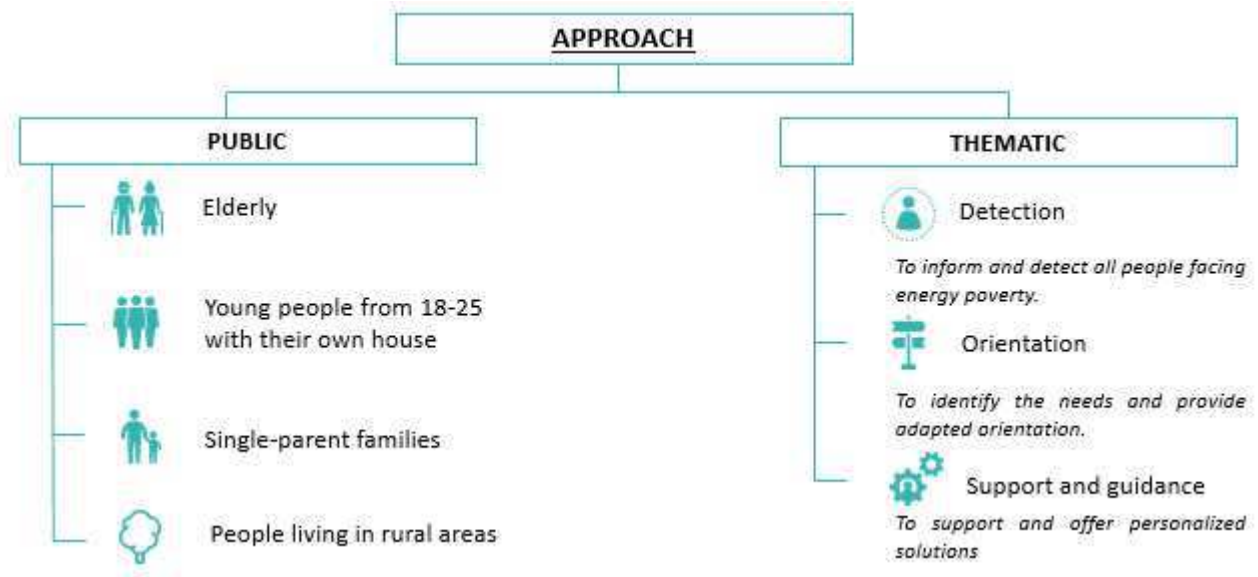
- **<u>Its expertise and large-scale projects in the fight against energy poverty</u>**:
  - the CIVIGAZ project, in collaboration with GRDF, mobilized more than 660 young volunteers in civic service to raise awareness of eco-gesture among 70 000 poor energy households.
- **<u>Past experience in EU-funded projects:</u>**
  - Interreg: UNEET (coordination)
  - Erasmus+: EuroVip (coordination) , Apprentice in Motion, SENSENET (coordination), EU Talent
  - DG Justice: CEASE (coordination),
  - EuropeAid: Support to the socio-professionnal integration of released young Tunisian prisoners at risk of radicalisation (coordination)

Thematic (Energy Source –EE & EC-) brokerage workshops

Our project idea

« Companies in the fight against energy poverty »

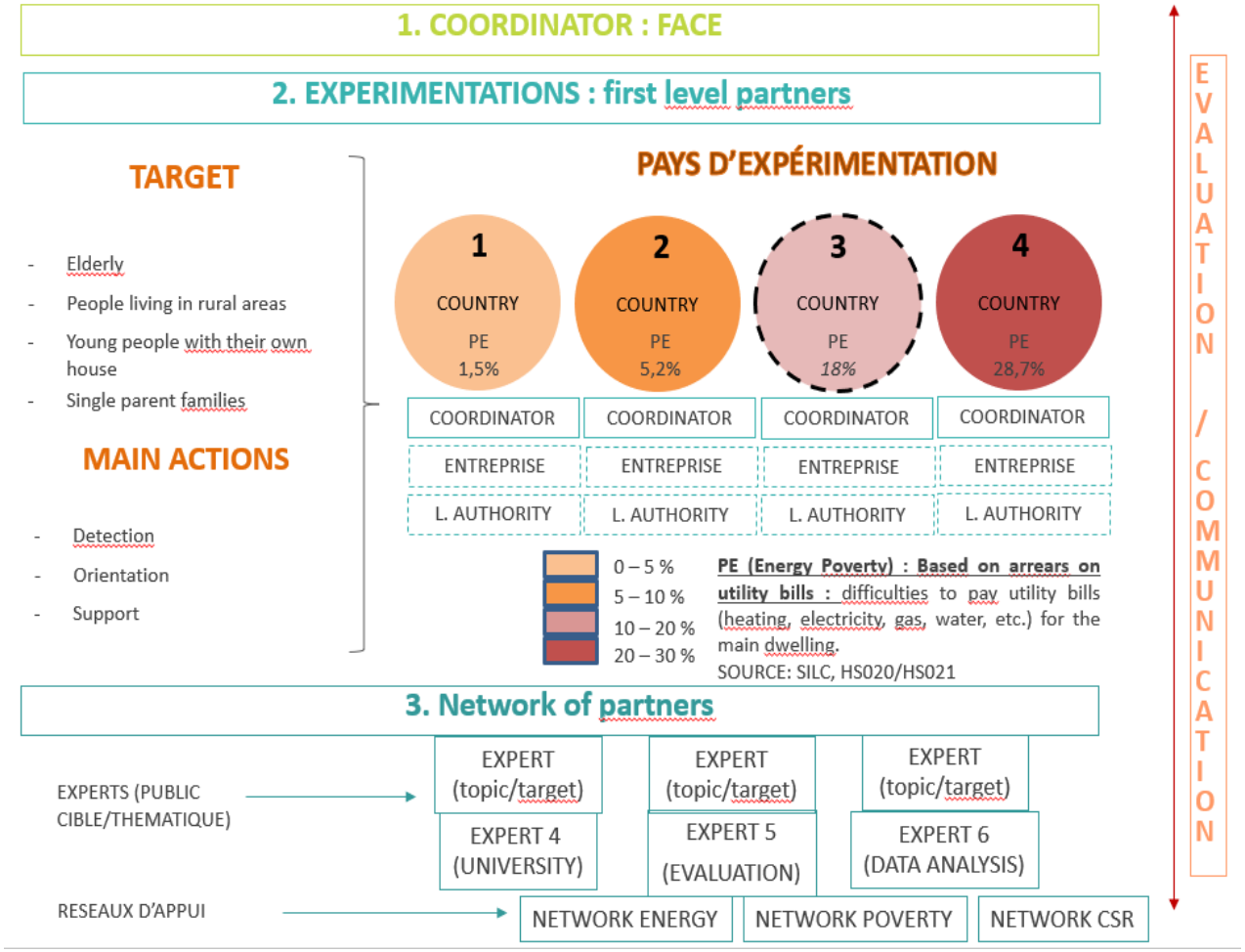
Our project will participate in mitigating energy poverty by **building and developing a transversal and inclusive methodology** based **on the involvement of companies**, aiming at **detecting, identifying, guiding and supporting people in situation of energy insecurity.**



Our **methodology** will be **co-designed** by **all partners** capitalizing successful methodologies and tools to detect, orientate and support different types of publics in about 4 different European countries. Our approach will be continuously evaluated in terms of results and social impact including an evaluation on the added value the implication of companies brings in the fight against energy poverty (roles companies can have, good practices sharing, return on investment…) looking forward creating working synergies with local authorities, social actors, and involved stakeholders as well as promoting Corporate Social Responsibility practices in energy poverty all around Europe.

Thematic (Energy Source –EE & EC-) brokerage workshops

Consortium



We are still looking for partners :

- Companies (energy, consulting…)
- Local authorities
- Social actors
- Universities, research centers
- Evaluation centers
- Gender approach experts
- Supporting networks

Thematic (Energy Source –EE & EC-) brokerage workshops

Contact details

If you are interested to join our challenging project (and our very dynamic team ☺),
do not hesitate to contact us:

Contact person	
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Behavioural Economics & Social Psychology

TOPICS

« The role of consumers in changing the market through informed decision and collective actions »

&

« Mitigating household energy poverty »

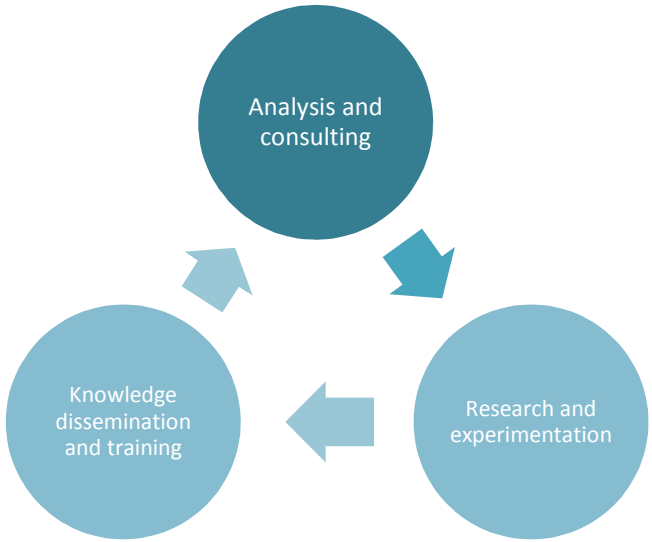
Energy Source -EE & EC-
brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

PSYKOLAB

- ✓ **Research and consulting agency in social sciences**
- ✓ **Behavioural decision making - applied projects understanding and changing individual behaviours for society wellbeing**



SKILLS AND EXPERTISE

- ✓Scientific framework (Game Theory & social cognition)
- ✓Decision making for cooperation & prosocial behaviours
- ✓Group dynamics
- ✓Nudges
- ✓Training / teaching

PAST EXPERIENCE IN ENERGY-RELATED PROJECTS

"SMART ELECTRIC LYON" (2012 – 2017)

***Partners** : Ademe*

Topic : Understanding citizen motivations to act on energy consumption

- ✓ Citizens consulting to understand social representations and energy practices
- ✓ Analyzing behaviours to identify solutions in order to limit consumption peak and to master energy expenses among households

"THE4BEES" (2016 – 2018)

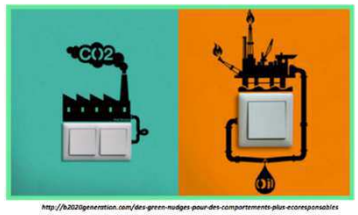
***Partners** : Interreg Alpine Space, Auvergne Rhône-Alpes Energie Environnement, Hespul.*

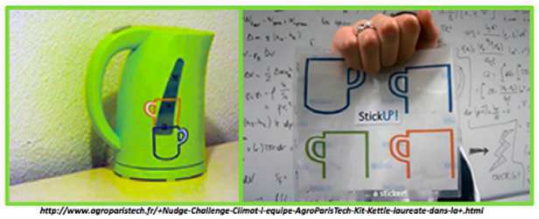
Topic : Support behavioural change in reducing energy consumption within a high-school

- ✓ Awareness of environmental problems
- ✓ Training in social psychology linked to sustainability
- ✓ Animation of laboratories of co-creation of Nudges
- ✓ "Green Nudges" experimentations

Our expertise

	Informed decision and collective actions	Mitigating household energy poverty
WHAT	• **Social psychological and economical** reasons of collective involvement (e.g. cost-benefit ratio, common goods theory) - **consumer profiling** • **Test of strategies** and type of information **to promote cooperation** (e.g. nudges, game theory) • Comparison of the effects of **different types of collective actions** • **Assess social and economical impact**	• **Socio-psychological determinants** of energy poverty at an individual / household level • **Needs and expectations** of future users • **Test of strategies to change behaviours** (e.g. nudges) **in context** • **Acceptability and appropriation** of the new services • **Assess social impact**
WHY	To efficiently involve consumers in collective actions concerning energy consumption and energy efficiency for higher empowerment	To design effective strategies to improve individuals and groups' awareness and change behaviours
HOW	• **Experimental protocols based on theoretical and applied benchmark** • Interviews / surveys / Observation of behaviours	



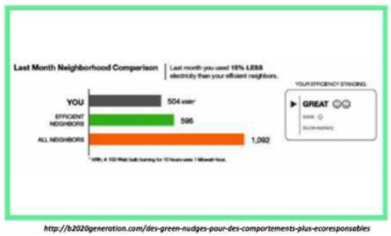


Thematic (Energy Source -EE & EC-) brokerage workshops

Idea of project

The role of consumers in changing the market through informed decision and collective actions

Research question	What type of information to involve individuals in order for them to cooperate and to think about collective benefits ?
Theoretical background	• Graphic / narrative *versus* numerical information (e.g. 1; 2 ; 3) • Information about individual *versus* building energy consumption (e.g. 4; 5; 6) • Common goods theory to better understand modalities to best allocate resources in groups (e.g. 7;8) • Nudges to influence descriptive *versus* injunctive social norms (e.g. 9; 10; 11)
Methodology	Experimental protocols



1. Bandura, A. (1978). Social learning theory of aggression. *Journal of communication*, *28*(3), 12-29.
2. Rothman, A. J., & Kiviniemi, M. T. (1999). Treating people with information: an analysis and review of approaches to communicating health risk information. *JNCI monographs*, *1999*(25), 44-51.
3. Okan Y., Stone, E., & Bruine de Bruin, W. (2018). Designing graphs that promote both risk understanding and behavior change. *Risk Analysis, 38, 929*–946.
4. Festinger, L. (1954). A theory of social comparison processes. *Human relations*, *7*(2), 117-140.
5. Frey, B. S., & Meier, S. (2004). Social comparisons and pro-social behavior: Testing" conditional cooperation" in a field experiment. *American Economic Review*, *94*(5), 1717-1722.
6. Roels, G., & Su, X. (2013). Optimal design of social comparison effects: Setting reference groups and reference points. *Management Science*, *60*(3), 606-627.
7. Perez, R. & Paranque, B. (2012). Elinor Ostrom : les communs et l'action collective. *Revue de l'organisation responsable*, vol. 7,(2), 3-10. doi:10.3917/ror.072.0003.
8. Isaurralde, M. (2015). L'approche comportementale de l'action collective chez Elinor Ostrom : quels prolongements pour l'économie sociale et solidaire ?. *Revue Française de Socio-Économie*, 15,(1), 97-115. doi:10.3917/rfse.015.0097.
9. Cialdini, R. B. (2003). Crafting normative messages to protect the environment. *Current directions in psychological science*, *12*(4), 105-109.
10. Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of consumer Research*, *35*(3), 472-482.
11. Demarque, C., Charalambides, L., Hilton, D. J., & Waroquier, L. (2015). Nudging sustainable consumption: The use of descriptive norms to promote a minority behavior in a realistic online shopping environment. *Journal of Environmental Psychology*, *43*, 166-174.

Consortium

PARTNER SEARCH

Type	Countries	Profile	Role in the project
Private / Public	Speaking French, English, Italian and Spanish	**Industries / societies / groups developing energy efficiency technologies / measures**	To develop and design and distribute the new technologies / services to be tested / analysed
		Building industries / societies involved in social/public housing	To distribute and install the new technologies / services to individuals and households
		Public institutions / consumer and user associations	To contact users and non-users to be involved in collective actions and / or to participate in the research
		Research groups in economics	Analysis of the regulatory barriers (knowledge of the economy of law) ; understanding cost-benefit ration ; assess economical and financial impact
		Research groups in sociology of organisations and public policies	Knowledge of territorial and political network ; keep the connection to public policies ; consumer profiling

Thematic (Energy Source -EE & EC-) brokerage workshops

Contact details

PSYKOLAB
PSYCHOLOGUES CRÉATEURS D'USAGES

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Audrey MOREAU, behavioural economist, project manager
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Guenièvre HERRSCHER, urbanist & sociologist
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Seraing Energy Master Plan

Opportunities for research, modeling and pilot applications

Thematic Energy Source EE & EC brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

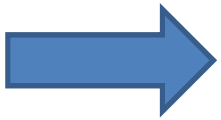
Who we are – AREBS

- Economic development agency for the municipality of Seraing
- In charge of the implementation of the city Climate Action Plan
- Interreg: ZECOS, RENEW, SERAMCO, N-POWER, etc.
- H2020 Smart City Lighthouse projects: REMOURBAN
- RENOWATT

Our project idea / expertise

Description of our project ideas :

- Deep retrofitting with the challenge of preserving cultural heritage
- Smart grid demonstration sites
- Vehicle to grid in a new multimodal platform

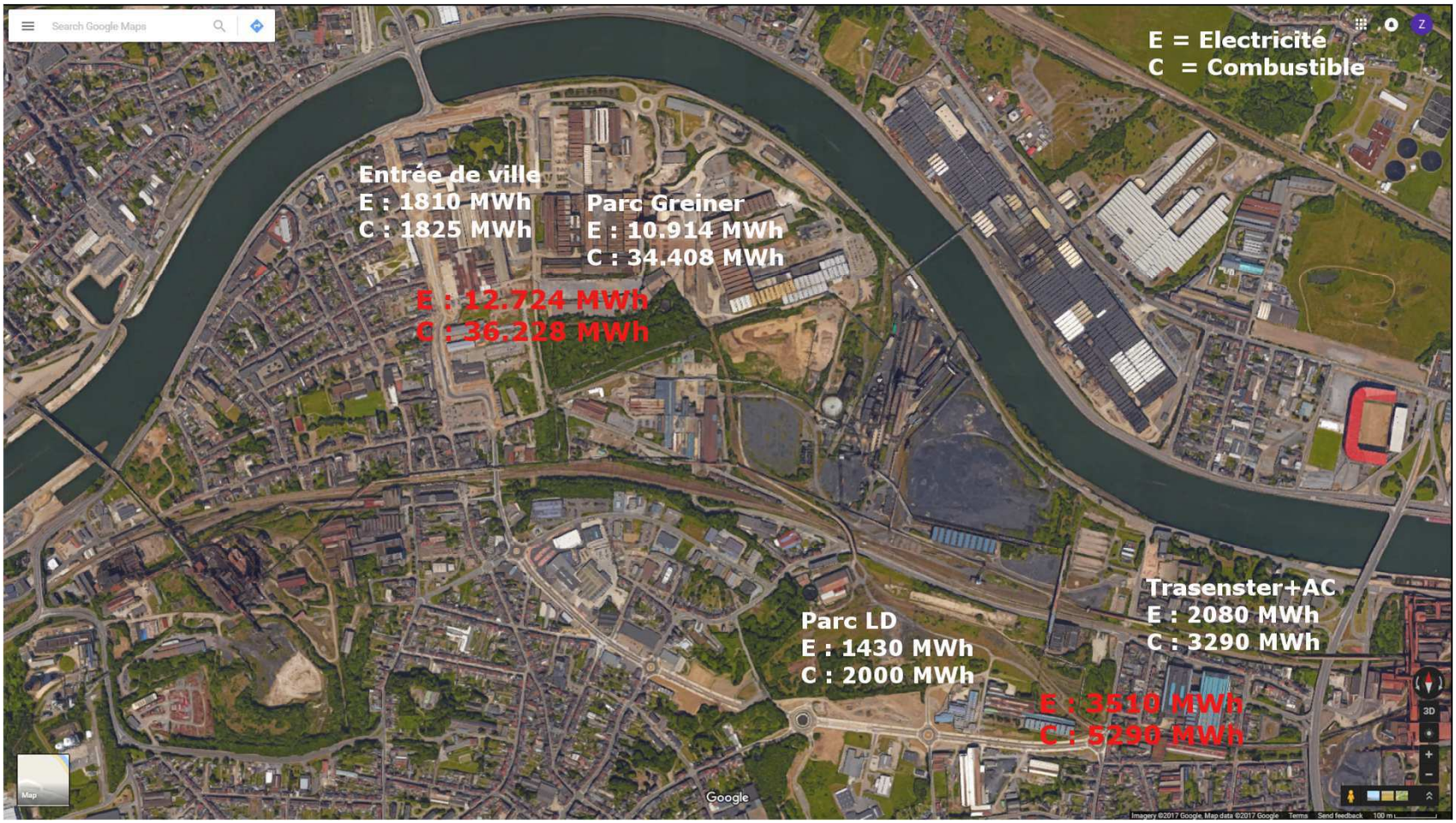


Need to raise awareness among a large range of consumers: citizens, industries, public authorities, etc.

We can offer:

- Buildings to connect to renewable energy supply
- A consumers community to create
- Industries with waste heat
- Connections with University of Liège and relevant local companies

Potential consumers to involve



Contact details

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Energy Research in Belarus

brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

Institute of Power Engineering of the Belarusian National Academy of Sciences

Republic scientific and industrial unitary enterprise was formed in July, 2008 for the purpose of scientific support of the energy sector development in the Republic of Belarus, carrying out fundamental and applied scientific research in the field of energy, energy conservation and energy efficiency. The postgraduate training program opened at the Institute of Power Engineering in 2014 in the specialty 05.14.01 – Energy systems and complexes (technical sciences).

The main objective set for the Institute is scientific support of the energy system development of the Republic of Belarus.

The Institute is the main Belarusian scientific institution in the field of energy. The Institute is a member of NASB and has close connections with other international organizations.

The Institute has 3 laboratories: the laboratory “Energy security”, the laboratory “Renewable energy”, the laboratory “Energy efficiency”, the Center of collective use for energy audit and the complex project engineering department
The Institute has 81 employees, including 2 academicians, 4 doctors of science and 8 candidates of science.

Main skills:

- development and monitoring of implementation of the concept of energy security, drawing up forecasts of development of energy system and energy balances of Republic of Belarus;
- carrying out basic and applied scientific researches in the field of power, energy saving and energy efficiency;
- development, production and introduction at the industrial, agricultural enterprises, objects of social infrastructure of energy efficient, energy saving technologies and equipment;
- scientific maintenance of realization of state programs on power, energy saving and renewables;
- carrying out power inspections (energy audits) enterprises and organizations; development of specific norms of consumption, actions for increase of efficiency of use;
- development of methodical recommendations, business plans, design and budget documentation, technical support of performance of work of modernization of the industrial and agricultural enterprises with use of the cogeneration technologies;
- development, design and production of the highly efficient energy saving equipment, including for utilization of secondary energy resources.

Energy Source brokerage workshops

Main expertise:

Council of Ministers of the Republic of Belarus

“Belarus’ Energy Security Concept”

- Revealed the main threats of energy security in the Belarus;
- Developed 12 indicators of an assessment of energy security for various aspects of power supply, which display the level of energy security of the country in general;
- Defined the directions of actions for neutralization of threats of energy security in the Belarus.

Belarusian Energy System Operator BELENERGO

"Development of the strategy for Smart Grid technologies implementation”

- Investigated the current state of implementation of the ‘Smart Grid’ technology on the Belarusian energy system objects;
- Developed the priority directions of introduction of the ‘Smart Grid’ technology in the Belarus;
- Defined the set of technical and economic indicators and estimated their expected values through 2020 for an assessment of the Belarusian energy system efficiency improvement from introduction of the ‘Smart Grid’ technology.

Energy Source brokerage workshops

Main expertise:

Vytautas Magnus University and Belarusian-Russian University Joint Project

"Comparative Evaluation of Lithuanian and Belarusian Energy Security From an Interdisciplinary Perspective"

- Defined 13 evaluation indicators and their threshold levels by the expertise;
- Created quantitative and qualitative assessment questionnaire on the Lithuanian and Belarusian energy systems' security;
- Evaluated level of energy security in the Belarus (based on 2010 data).

Azerbaijan Scientific-Research and Prospecting-Design Power Institute Joint Project
"Azerbaijan and Belarus Current Stage Energy Security Indicators Selection and Evaluation"

- Evaluated the main energy security threats for the Azerbaijan and the Belarus;
- Defined the priorities in energy security strengthening for both countries;
- Developed sets for energy security assessment indicators for the Azerbaijan and the Belarus;
- Prepared several projects for energy security improvement in the Azerbaijan and the Belarus.

Energy Source brokerage workshops

Past experience in EU-Funded Project

“Environment and security ” (ENVSEC, Geneva - Switzerland), Central European University (Budapest, Hungary) and University Lund (Sweden) Joint Project

“Environmental Scenario of Energy System Development in Belarus”

- Collected the data on the prospects of various heat and electricity production technologies development in the Belarus, including IES coal / thermal power station, nuclear power plants, the technology of natural gas, wind power and others;

- Calculated the indicator of CO2 emission (during heat and electricity production) to assess the environmental safety in the Belarus.

Past experience in EU-Funded Project

REDCSY

Renewable Energy DC System for Local Areas as a Reliable and Economic Efficient Component of Future Grids

SHORT NAME: **REDCSY**

Call: LC-SC3-ES-3-2018-2020
IA Innovation action

List of participants

Part. No	Participant organisation name	Short name	Country
1	Fraunhofer Gesellschaft zur Foerderung der angewandten Forschung E.V.	Fraunhofer	Germany
2	University of Cagliari	UNICA	Italy
3	Electrum Ltd.	Electrum	Poland
4	Institute of Power Engineering of the Academy of Sciences of Belarus	IPE	Belarus
5	University of Kiel	CAU	Germany
6	Università degli Studi di Roma "Tor Vergata"	UNITOV	Italy
7	AGH University of Science and Technology	AGH	Poland
8	Magdeburg University of Applied Sciences	HS MD SDL	Germany
9	Politecnico di Milano	POLIMI	Italy
10	Comune di Berchidda	Berchidda	Italy
11	Harz-Regenerativ-Druiberg e.V.	HRD	Germany

Associated partners

Part. No	Participant organisation name		Country
12	European Business and Technology Centre	EBTC	India
13	Dardeshaim municipality	DM	Germany
14	Alfaisal University	AU	Saudi Arabia
15	European Copper Institute	ECI	Poland
16	ABB Corporate Research Centre in Poland	ABB	Poland

Source brokerage workshops

Our expertise could be usefull for:

TOPIC : Socio-economic research conceptualising and modelling energy efficiency and energy demand

Topic identifier:	LC-SC3-EE-14-2018-2019-2020
Publication date:	27 October 2017
Focus area:	Building a low-carbon, climate resilient future (LC)

Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage		
Opening date:	25 January 2018	**Deadline:**	04 September 2018 17:00:00
Types of action:	RIA Research and Innovation action		
DeadlineModel:	single-stage		
Opening date:	24 January 2019	**Deadline:**	03 September 2019 17:00:00

Time Zone : (Brussels time)

Methodology of sustainable development of the energy sector.
Development of consumption forecasts of fuel and energy resources for medium-term prospect taking into account various options of the economic development of the country.
Market research of the world and regional markets of the main energy equipment and technologies.

Energy Source brokerage workshops

Our expertise could be usefull for:

TOPIC : Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side as energy resource

Topic identifier:	LC-SC3-EE-13-2018-2019-2020
Publication date:	27 October 2017
Focus area:	Building a low-carbon, climate resilient future (LC)

Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	**Deadline:**	04 September 2018 17:00:00
Opening date:	25 January 2018		
Types of action:	IA Innovation action		
DeadlineModel:	single-stage	**Deadline:**	03 September 2019 17:00:00
Opening date:	24 January 2019		

Time Zone : (Brussels time)

Market research of the world and regional markets of the main energy equipment and technologies.
Study of the behavior of consumers of energy services.
Analysis and forecasting of demand for energy resources.
Development of business models for energy services.

Energy Source brokerage workshops

Our expertise could be usefull for:

TOPIC : Capacity building programmes to support implementation of energy audits

Topic identifier:	LC-SC3-EE-8-2018-2019		
Publication date:	27 October 2017		
Focus area:	Building a low-carbon, climate resilient future (LC)		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	**Deadline:**	04 September 2018 17:00:00
Opening date:	25 January 2018		
Types of action:	CSA Coordination and support action		
DeadlineModel:	single-stage	**Deadline:**	03 September 2019 17:00:00
Opening date:	24 January 2019		

Time Zone : (Brussels time)

Energy inspections of the enterprises and organizations (energy audits), development of specific recommendations on fuel energy resources consumption, energy saving activities and plans of their implementation. Software program “ENERGY AUDIT”.

Energy Source brokerage workshops

Contact details

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Phone number	+375 29 667 85 07
E-mail	tanyazorina@tut.by

Experts in human sciences

(Social psychologist and data scientist)

Understanding behavioral change,
modelling behaviours

Thematic Energy Source –EE & EC- brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020
Paris, 21st June 2018

ENVIRONNONS

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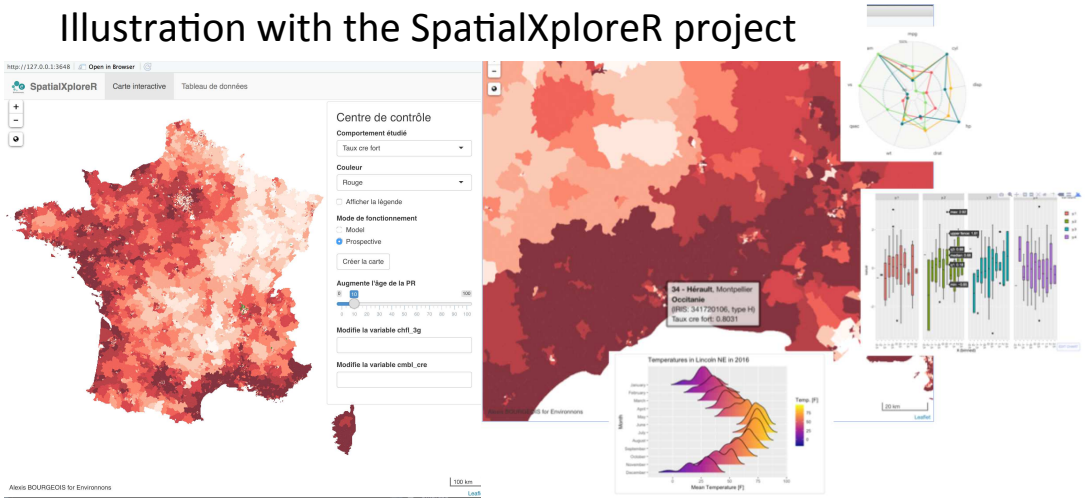
environnons

- ## WHO WE ARE ?
  - French SME dedicated to researches in **SOCIAL PSYCHOLOGY COMBINED WITH DATA SCIENCES**
  - Team of social psychologist and data scientist
  - Dr. In social psychology and physics
- ## SKILLS AND EXPERTISES
  - Aim to **HIGHLIGHT BEHAVIORAL COMPONENTS** on several environmental topics (energy consumption, building, aircraft noise, nature in city, environmental risks, mobility, *etc.*)
  - To model them…
  - In order to define **NEW PROSPECTIVE TOOLS**
- ## PAST EXPERIENCES
  - **PARTNER IN THE EUROPEAN PROJECT H2020 ANIMA** (Aviation Noise Impact Management through novel Approaches), research project aiming at developing tools to manage the impact of aviation noise, started in october 2017 until october 2021
  - **PARTNER** IN SEVERAL RESEARCHES aimed to include behaviors to improve predictive modelling **IN LIFE CYCLE ENERGY ANALYSIS OF BUILDINGS (MinesParitech, VINCI, Agroparitech, *etc.*)**

Prospect the future energetic use

- By performing a fine analysis of household and users way of life
- By using this analysis to generate a prospective tool on a large scale

Illustration with the SpatialXploreR project



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Electrical Metrology

Metrology support for energy transition

Industry & services – Energy Source brokerage workshops

EU Brokerage Event on Energy Efficiency in Horizon 2020

Paris, 21st June 2018

Laboratoire National de Métrologie et d'Essais
French National Laboratory of Metrology and Testing

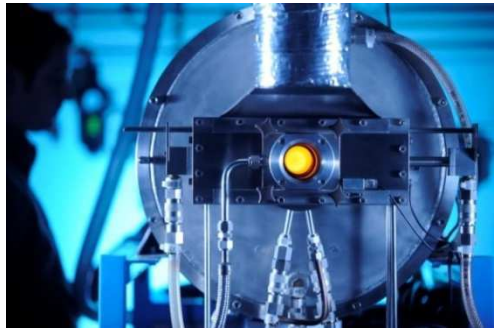
National References of SI (International System of Units)

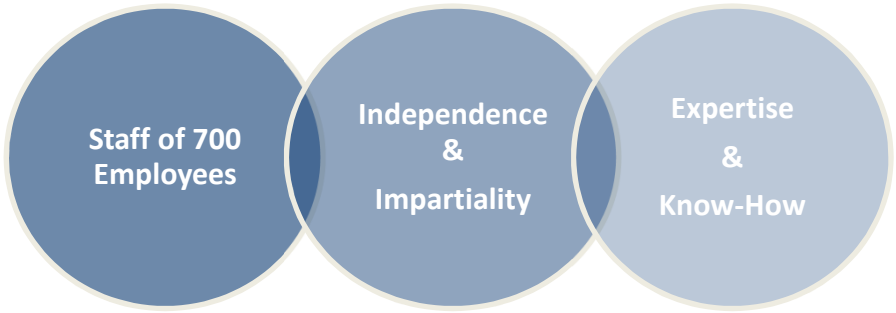
Electricity, Magnetism, Time & Frequency, Dimensional, Radiometry, Photometry, Mass, Temperature, Chemistry

Metrological measures, characterisation, services

Europeen and international projects

Legal metrology





The Smart Electrical Grids depend on reliable test & measurements

The metrology is a precious added value for all the actors

Manufacturers: Grid components, instrumentation

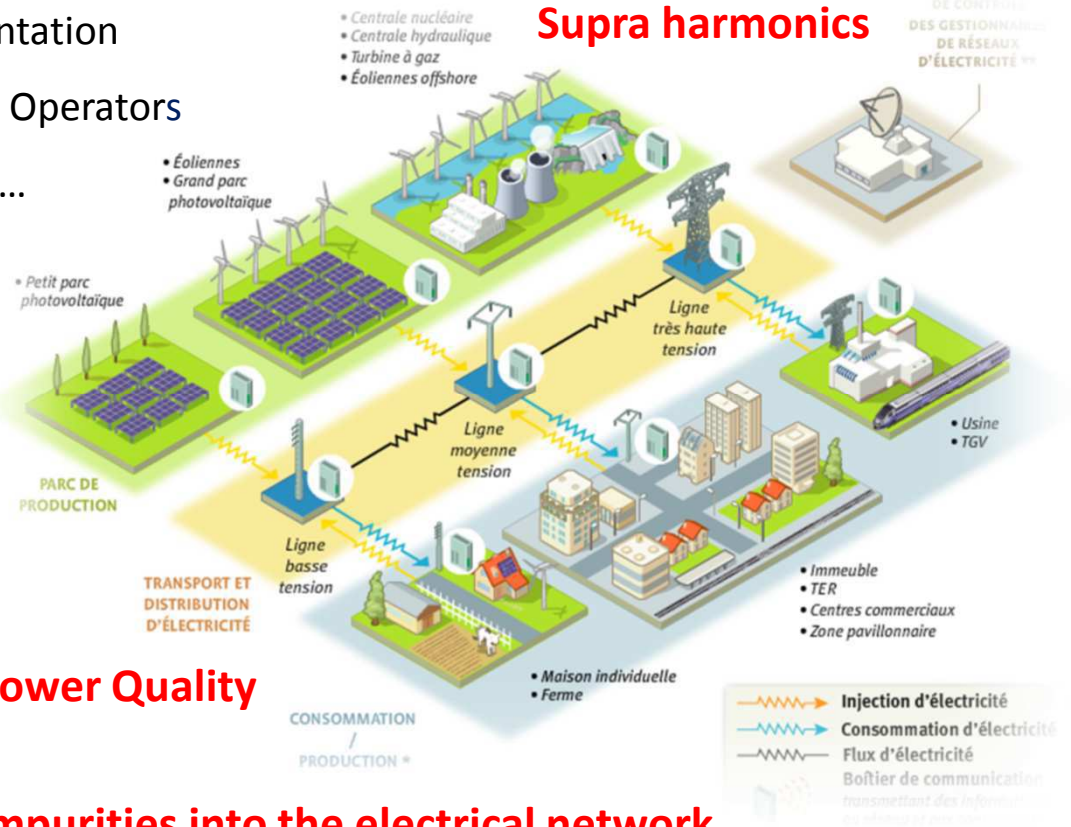
Utilities: Transmission & distribution System Operators

Standardisation bodies: CEN, CENELEC, ISO,…

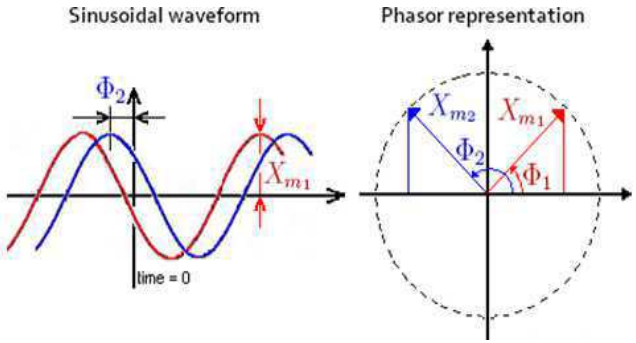
Service providers: Test institutes, consulting

Governments: National, EU

Supra harmonics



Smart Grid stability



Power Quality

Impurities into the electrical network

The Electrical Metrology Division

50 colleagues

50 % Research Engineers

2500 m² laboratories

5 PhD studients

19 current R&D projects EURAMET/H2020/National

Recognition CIPM MRA – BIPM

Metrology activities related to measurement support of electricity grids = 11 FTE efforts

Synchrophasor technology

New sensors for grid monitoring

Metrological basis for industrial testing of grid components

Power quality measurements

Smart meters

Measurement of losses in grid components to advance design

High Voltage AC DC

Contact details

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Thanks for your attention