



institut
smart grids
... connecter les énergies



Welcome !

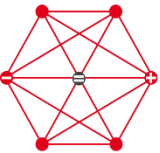


ONLY LYON

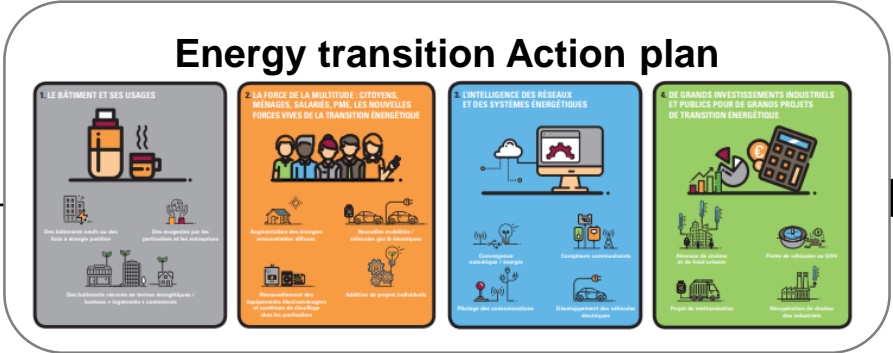
David LEICHER AUCHAPT
Smart Grids Engineer Lyon Métropole

Lyon Metropole Energy Strategy & Smart grids

Energy strategy



**SCHÉMA
DIRECTEUR
ÉNERGIES
GRANDLYON**



Smart grids

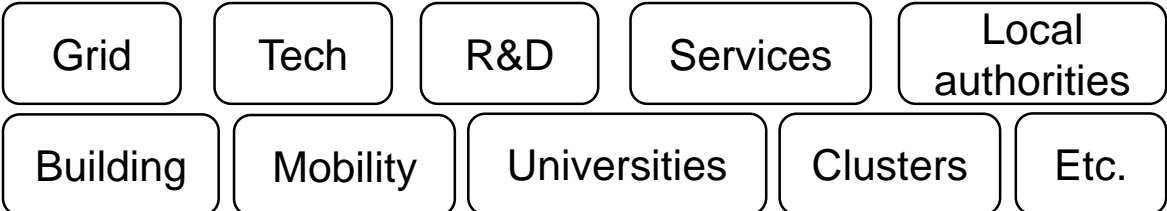


Energy consumption by 2030 vs 2013
 GHG by 2030 vs 2000
 Renewables & Recovery of energy

Smart grid experimentation



Smart grids stakeholders





Claus HABFAST

Vice-President Research, Innovation &
International relations



Olivier JARAY
Managing Director

Created in the French energy region

Auvergne-Rhône-Alpes

1st positive energy region

Electricity exporter to France & abroad

With an exemplary energy mix

27,4% of renewable energy produced in France

Advanced in Smart Grids R&D

For 10 years - 5 b€ of investments - 900 patents

50% of Smart Grids pilots & demonstrators tested in the region with 2 iconic Smart Cities (Grenoble et Lyon)



The Smart Grids Institute is...



Institutionals, industrialists, start-up & SMEs, universities...



In partnership with



Combine **innovation, digital and energy technologies**

Serving the **energy transition, economic and ecological** development of territories

Renewable energies

RE integration, self-consumption, storage, production-consumption synergies ...

Sustainable mobility

CO₂ free vehicles (electric, biogas, H₂O), smart charging, charging stations, ...

Energy efficiency

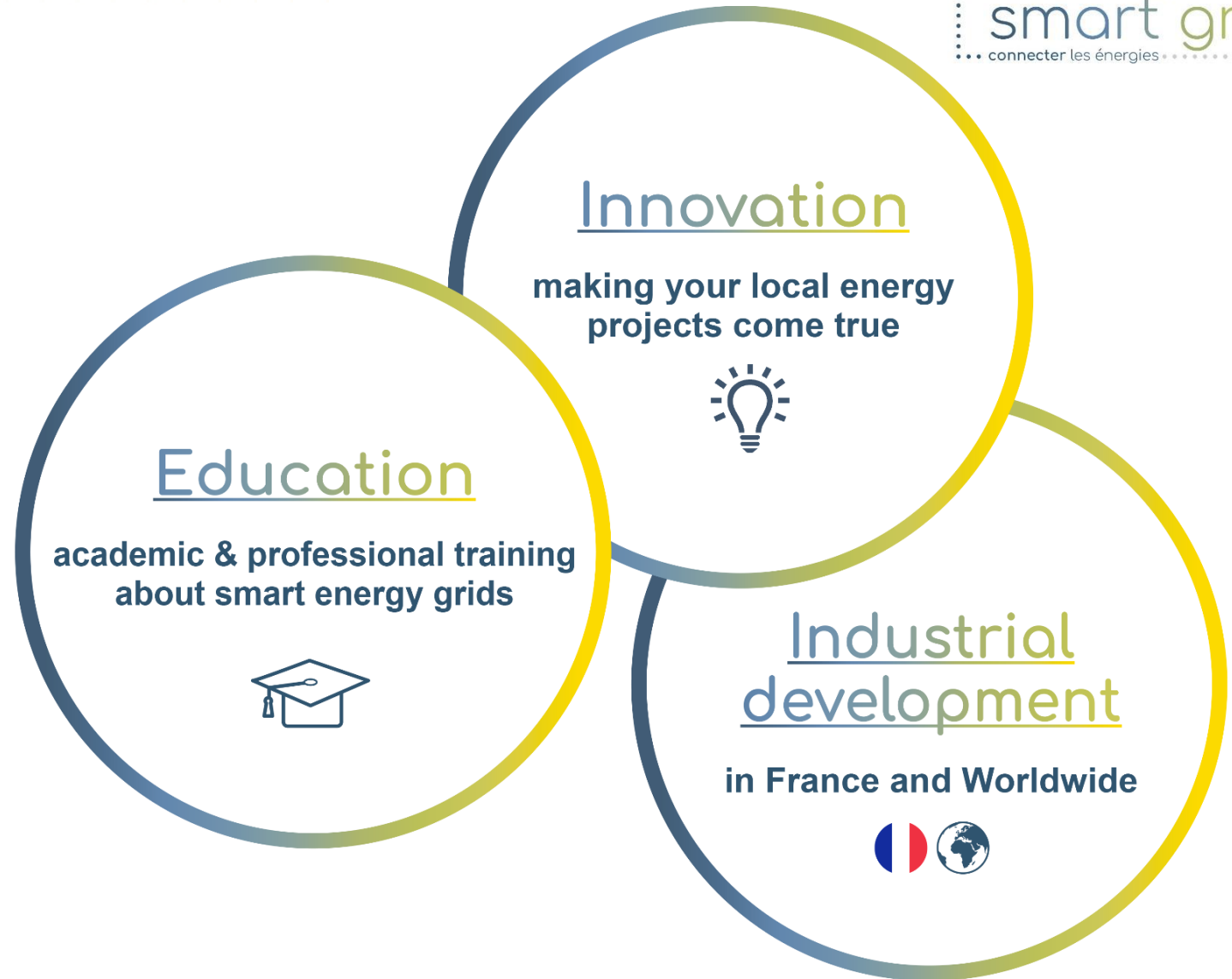
Smart building, data management, AI, citizen involvement ...



Smart Grids involved in the energy road maps of territories (France, regions, Metropolis and local authorities)

3 axes

of collaboration for your
energy projects



Achievements

EDUCATION
academic &
professional
trainings



Example : specialized training
classes for engineering schools

Achievements

EDUCATION
academic &
professional
trainings



Example : Energy Transition and
Smart Grids training seminars

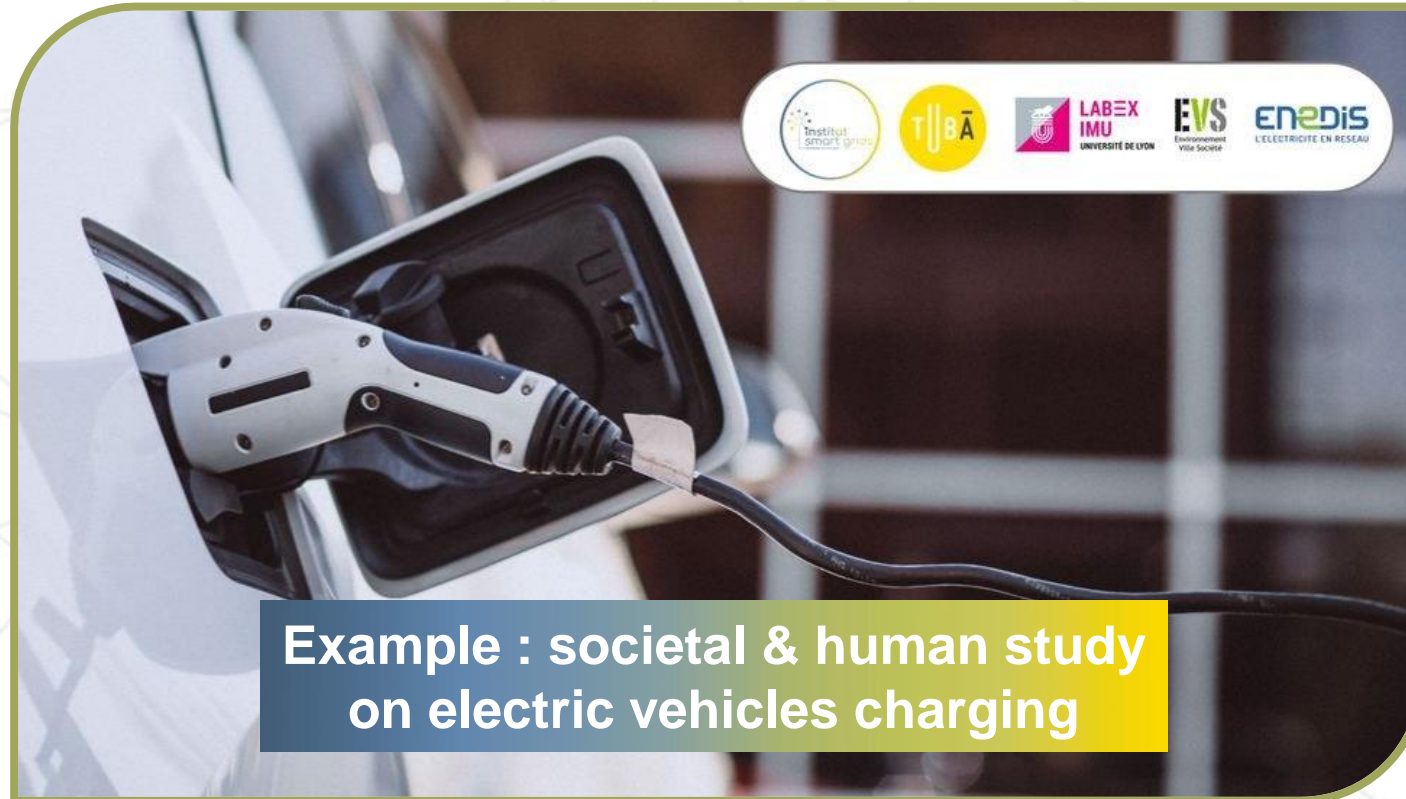
Achievements

INNOVATION
R&D and local
innovative
projects



Achievements

INNOVATION
R&D and local
innovative
projects



Example : societal & human study
on electric vehicles charging

Achievements

DEVELOPEMENT
French &
International



Example : Reception of foreign
delegations

Achievements

DEVELOPEMENT
French &
International



Africit 



Odit 

Luc RICHAUD
Business Developer



Africit

PROJECT

THE DIGITAL ERA FOR ELECTRICAL NETWORKS

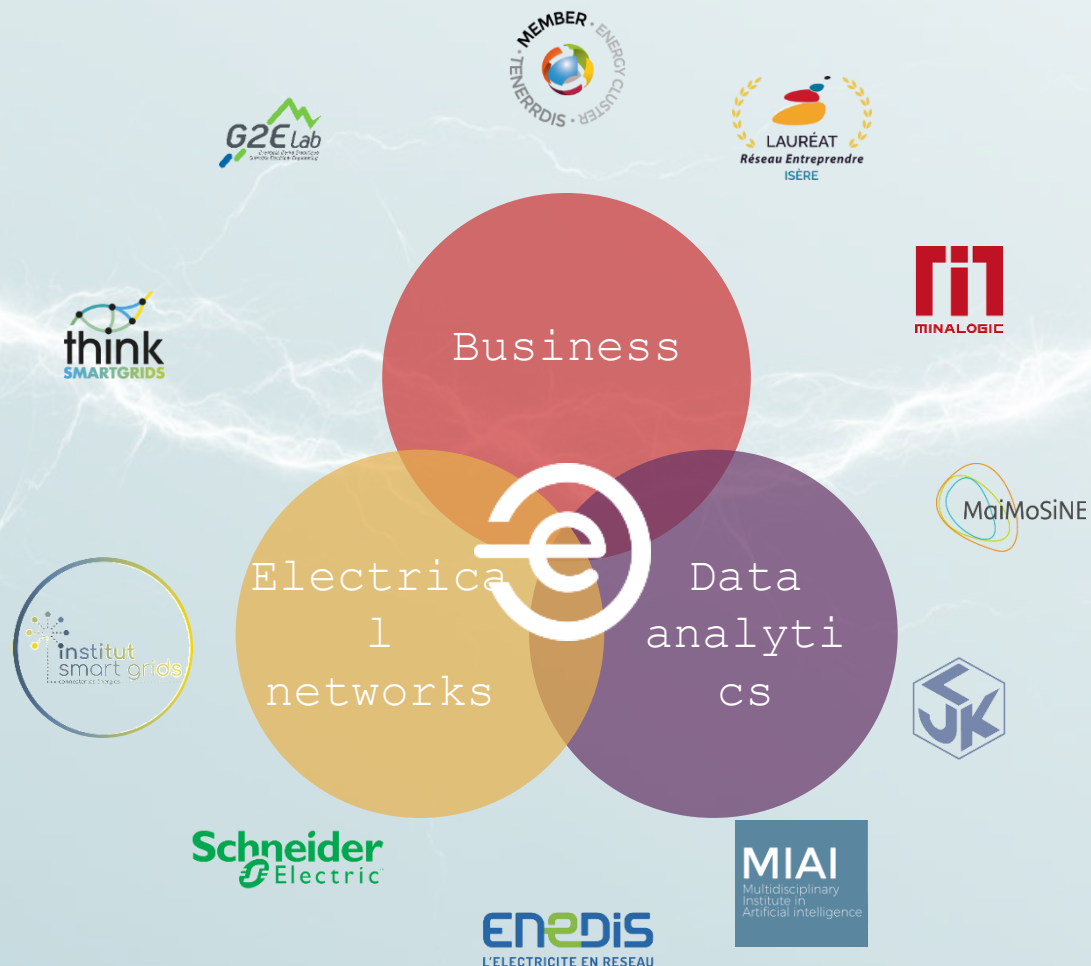
www.odit-e.com

Luc Richaud

Supervision and decision support software for the operation of LV networks

THE DIGITAL ERA FOR ELECTRICAL
NETWORK

*Add a new dimension to your operating
data*



- Company created in 2017
- 6 co-founders
- From Schneider & G2Elab
- 8 people in Grenoble - France
- 2 people in Barcelona - Spain

A combination of skills in
artificial intelligence &
distribution networks

- 60 years of cumulated experience in electrical distribution
- Two PhDs in data analytics

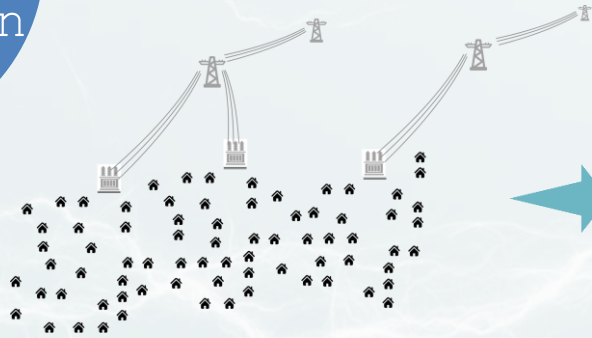
GET THE MOST OF YOUR SMART METERS



THE DIGITAL ERA FOR ELECTRICAL NETWORK

Add a new dimension to your operating data

Supporting energy transition



LV impact prediction

Impact of PV panel, EV or load evolution



LV state estimation

Real time state estimation from available data



LV cartography

Improved reliability and completion of existing databases

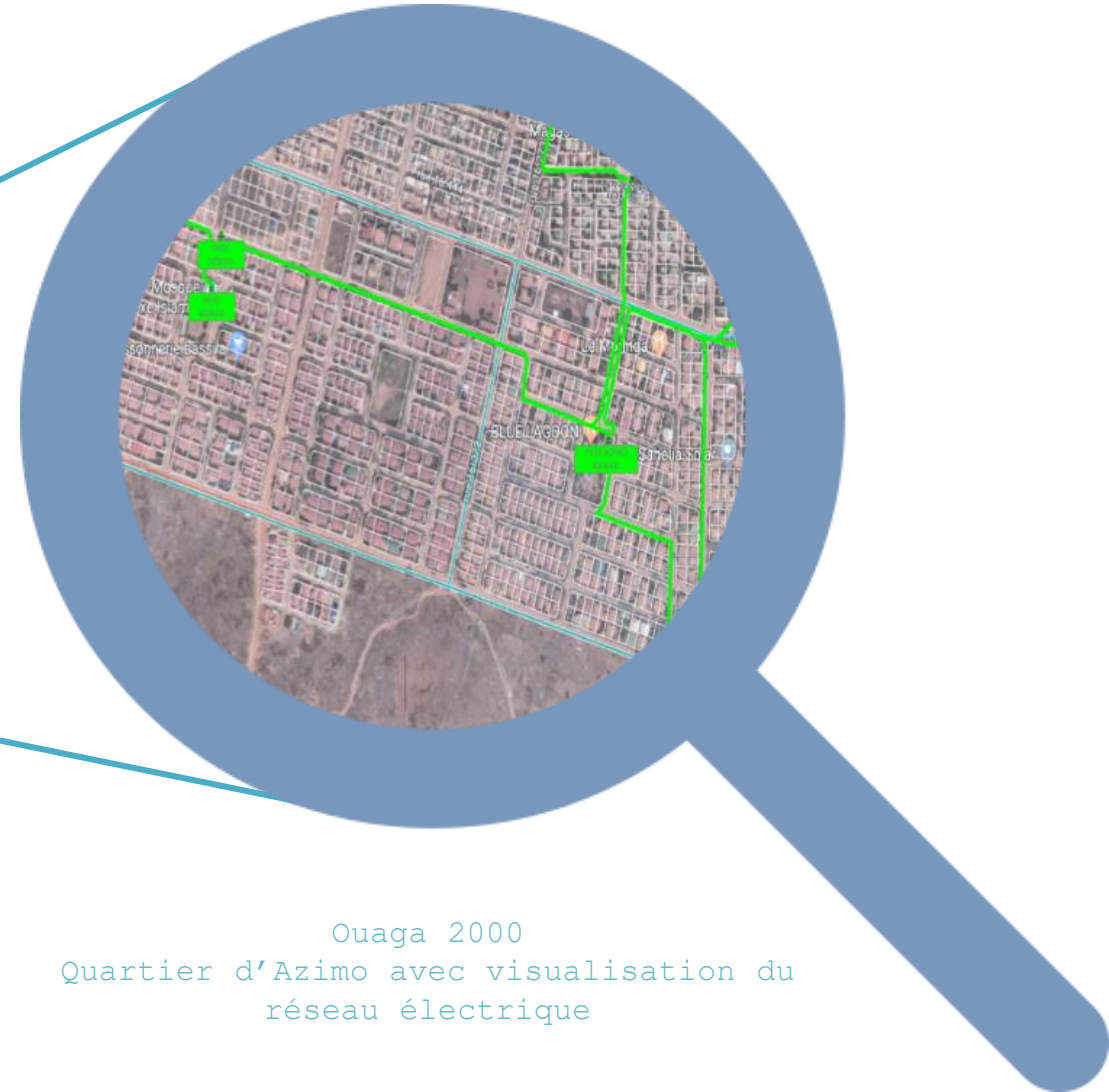
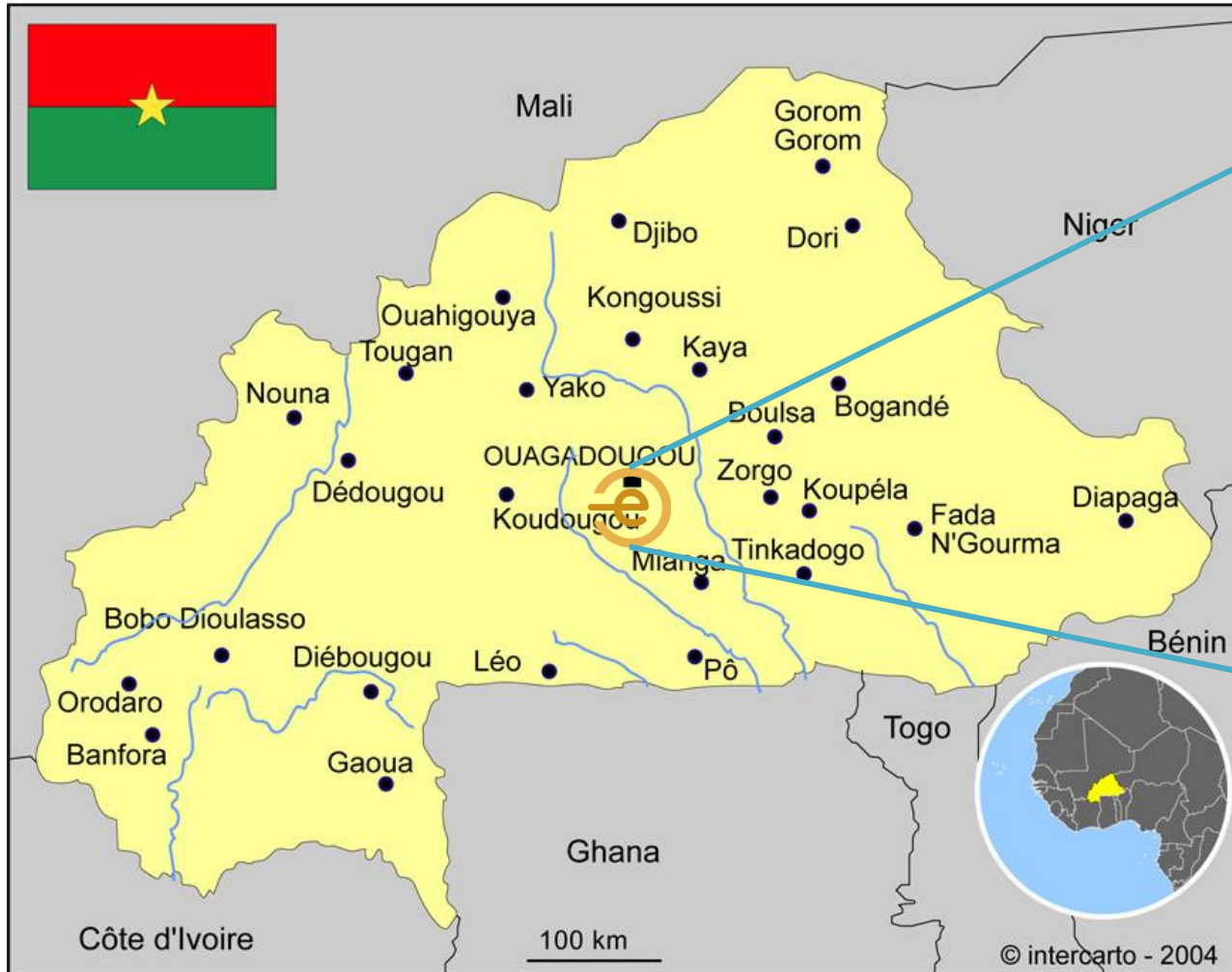
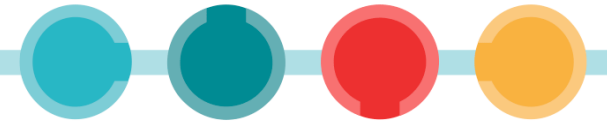
Improving network knowledge

Avoiding network reinforcements

Detecting losses

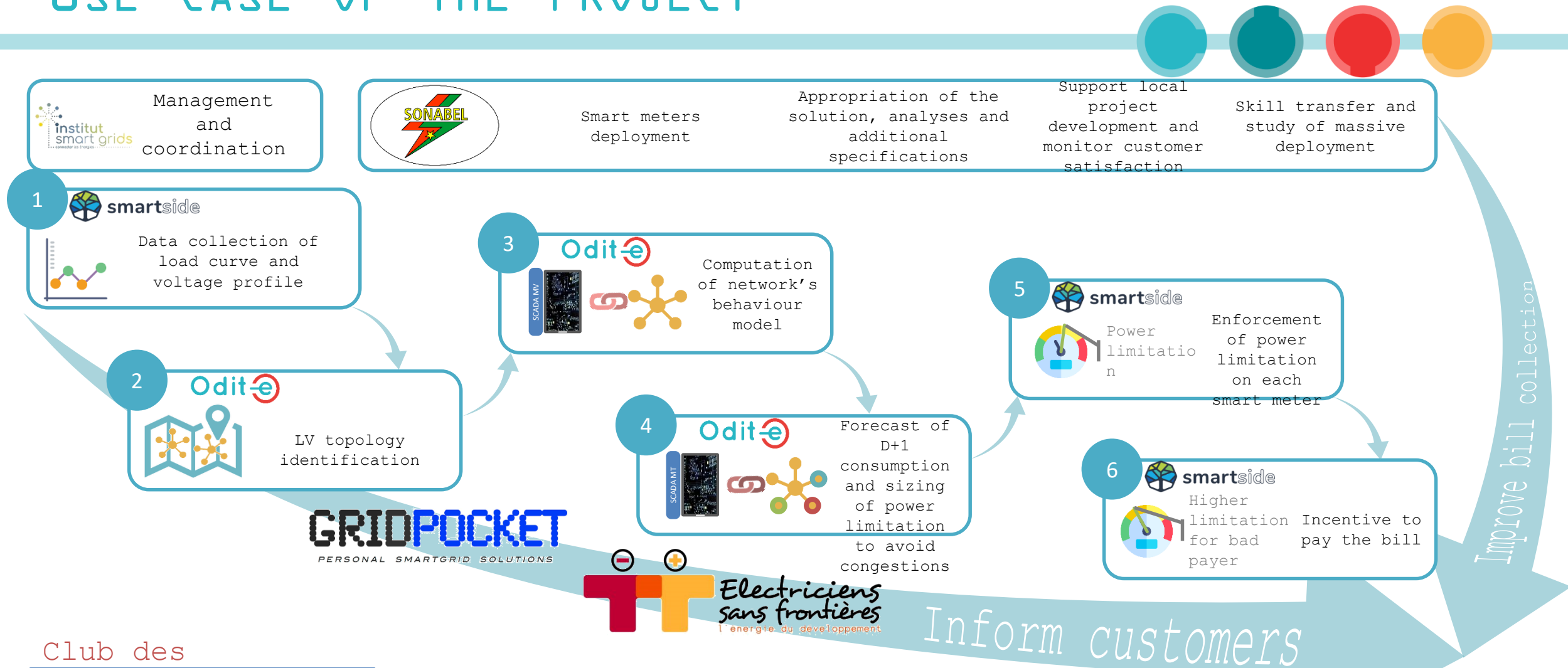
Real time operation

LOCATION OF THE PROJECT



Ouaga 2000
Quartier d'Azimo avec visualisation du
réseau électrique

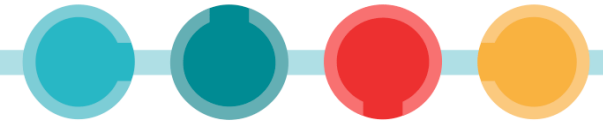
USE CASE OF THE PROJECT



Club des partenaires :



PROJECT PLANNING



Proposal preparation planning:

- 14th June 2019 -> Submission to the call for projects "Sustainable city in Africa"
- 6th Sept 2019 -> The project is being taken into consideration

Project realisation planning

		Jan - 2020	Feb - 2020	Mar - 2020	Apr - 2020	May - 2020	Jun - 2020	Jul - 2020	Aug - 2020	Sep - 2020	Oct - 2020	Nov - 2020	Dec - 2020
WP 1	Project management						★ Summit						★
WP 2	Deployment of smart metering infrastructure and data collection												
WP 3	Functional and technical specifications												
WP 4	Development and validation of the solution												
WP 5	Feedback over the experimentation and generalisation plan												
WP 6	Photovoltaic insertion capacity map of the studied network												
Reports	Initial report												
	Interim report												
	Final report												



THANK YOU

THE DIGITAL ERA FOR ELECTRICAL NETWORKS

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THANK YOU FOR YOUR ATTENTION



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