Network of charging stations for 100% green electric mobility

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Year of commitment: 2018

Green energies: Energy Grid, Energy Distribution, Electricity
Sustainable mobility: Intra-urban mobility, Charging station

Builder
Schneider Electric, Tritium Technologies, iES Synergy

Manager / Dealer
IZIVIA FMET 1

GENERAL INFORMATION

Electric mobility is a key solution for preserving our planet and rapidly improving the quality of the air we breathe. This electric mobility can only become a reality and a generality on the condition that charging stations are deployed on a massive scale. For these reasons, the Lyon metropolitan area has joined forces with the Demeter (an investment fund) and IZIVIA (the EDF subsidiary specializing in electric mobility) consortium to co-construct with the 59 municipalities in the area, the IZIVIA Grand Lyon network of charging stations for electric vehicles supplied 100% by green electricity. The IZIVIA Grand Lyon network is being rolled out and will consist of 750 places to charge electric cars. In March 2021, 60 stations were open. The network is accessible 24/7 and offers 4 different charging powers: 7kW / 24kW / 50kW / 150kW
Progress Status
In progress

Data Reliability
Self-declared

Funding Type
Private

Website Enterprise / Infrastructure
https://grandlyon.izivia.com/

Sustainable Development

Attractiveness:
- To better understand the needs of the inhabitants of the Metropolis, we have set up an on-demand terminal site. Via a form, they can indicate the areas where there are owners of electric cars and recharging infrastructure needs. This allows us to map the needs and adapt the deployment by prioritizing certain areas.
- Our desire is to deploy a network of terminals in good understanding: we deploy it by associating all the actors of the territory in the definition of the locations of the stations (services of the Metropolis, municipalities, municipal police, manager of the electricity network, Architects of buildings in France, ...).

Well Being:
We want to lift the brakes on electric mobility. For it:
- our stations are accessible with a recharging card (the IZIVIA Grand Lyon Pass) to facilitate the act of charging
- a "to the act" solution is also available so that non-subscribers can charge their car easily
- a mobile application (the IZIVIA application) allows you to choose a terminal and see if it is available before parking there

Social Cohesion:
This network of charging stations allows everyone to charge their electric car: no need to have a private car park to enjoy silent mobility that does not emit CO2. The charging stations are installed in strategic places, especially at meeting places and while the car is charging, you can enjoy your leisure activities.

Preservation / Environmental Improvement:
Thanks to a system of certificates of origin, the charging stations are powered by 100% green energy. Concretely, for each electron delivered by the terminals, an electron produced by a green energy source (solar, wind, hydro) is injected into the electricity network.

Resilience:
IZIVIA is a specialist in operating charging networks for electric cars. We are therefore able to keep the infrastructures in good working order or to intervene as quickly as possible.

Responsible use of resources:
In deploying this network, IZIVIA Grand Lyon has endeavored to renovate infrastructure to use elements already installed. IZIVIA and Demeter therefore acquired at the end of 2020 the infrastructures of the former Bluely network (a network of terminals for car sharing which was to be abandoned). Aging, these infrastructures will be renovated during the first half of 2021: we are keeping the exterior and we are changing the electronic part inside the terminals to meet current needs (increase in power and upgrade to current standards).

Testimony / Feedback

Sébastien le Gall, Founder of Leaf France café (association of electric vehicle users)
November 19, 2020

"Faced with the abandonment by Ikéa of its fast terminal, the poor condition of the Auchan terminals and the disappearance of Bolloré from the Lyon landscape (Greater Lyon is negotiating the takeover of the Bluely terminals by LPA or Izivia), how can we not be delighted with the arrival of the IZIVIA Grand Lyon network?

641 charging points currently being set up in the 59 municipalities of Greater Lyon.

Pyramid-shaped network with a large base of 7kW AC terminals, 22kW AC and 24kW DC accelerated terminals installed by 2, a third stage of 50kW fast terminals and a 150kW super fast terminal at the top.

What, with a studied tariff, to satisfy as well the urban ones who have catch in residence as the charges of feeding or roaming."

Governance
IZIVIA Greater Lyon
IZIVIA Grand Lyon is the name of the network of charging stations for electric cars. It is deployed by a group of two companies named IZIVIA FMET 1 and whose shareholders and members of the board of directors are employees of the IZIVIA company or of the Demeter investment fund.

**Business Model:**
The IZIVIA / DEMETER group invests, bears all the costs and takes the risk of frequentation in order to be remunerated. The group pays a fee for occupying the public domain to the Metropolis. This model was set up following a Call for Private Initiative (AIP) from the metropolis of Lyon.

**Sustainable Solutions**

1 network of charging stations, 4 powers available

**Description:**
On the IZIVIA Grand Lyon network, we install 4 different powers which are distributed over the territory according to road traffic and recharging needs. The demand for charging power differs if you are in a residential area, a commercial area or on a major road: you need to charge your car more or less quickly. As the charging price varies according to the power delivered, we have endeavored to install the right terminal in the right place. The IZIVIA Grand Lyon network is made up of:

- 135 normal charging stations (residential) or 500 places with terminals delivering 7kW. On a 7 kW terminal, we recover an average of 50 km of autonomy in 1 hour.
  - composed of 4 parking spaces, 2 terminals with 2 charging points at 7 kW in alternating current
  - composed of 2 parking spaces, a terminal with 2 charging points at 7 kW in alternating current
  - renovation of the old Bluely “retrofit” terminals, comprising 4 parking spaces, 4 terminals with 1 charging point at 7 kW in alternating current
- 50 accelerated charging stations (residential and town center) and 200 spaces with terminals delivering 24kW. On a 24 kW terminal, we recover an average of 150 km of autonomy in 1 hour.
  - Composed of 4 parking spaces, 2 terminals with 2 tri-standard 24kW charging points
- 20 fast charging stations (back-up charging), i.e. 41 places with terminals delivering 50 kW. On a 50 kW terminal, an average of 150 km of autonomy is recovered in 30 min.
  - Composed of 2 parking spaces, 1 terminal with 2 tri-standard 50 kW charging points
- 1 ultra-fast charging station (recharging on long haul trucks). On a 7 kW terminal, an average of 250 km of autonomy is recovered in 15 min.
  - Composed of 3 parking spaces, 1 bollard with 2 tri-standard 50 kW charging points and 1 bollard with one 150 kW DC charging point (bi-standard)
  - Air quality
  - Electric vehicles

**Reasons for participating in the competition(s)**

Les points forts du réseau IZIVIA Grand Lyon sont :
- un réseau d'utilité publique, ouvert à tous et sans investissement public
- le maillage territorial de l'infrastructure : tout le territoire de la métropole de Lyon peut bénéficier de cette solution de rechange
- l'universalité du réseau de bornes : avec des bornes de recharge compatibles avec toutes les voitures électriques du marché
- un réseau vecteur de la transition écologique et de l'amélioration de la qualité de l'air en ville

**Photo credit**
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