



BOREAS
energy unlimited



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BOREAS plans, builds, finances, operates, and markets wind power, photovoltaic, biogas and energy storage installations throughout Europe.
Our motto :

Produce renewable energy where it is needed.

33

years of experience in
renewable energy



two local actors:
Boulay - Moselle
and **La Rochelle**
France

200+

employees
(including 30 in France)

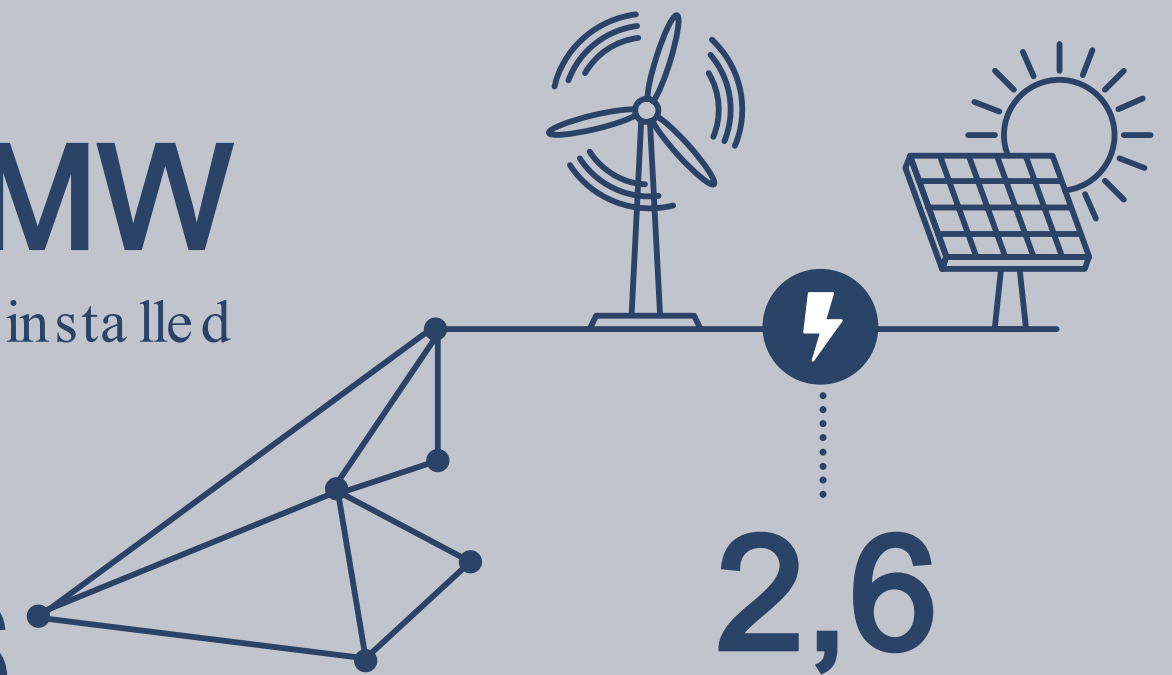
1.222 MW
nominal power installed

2,96

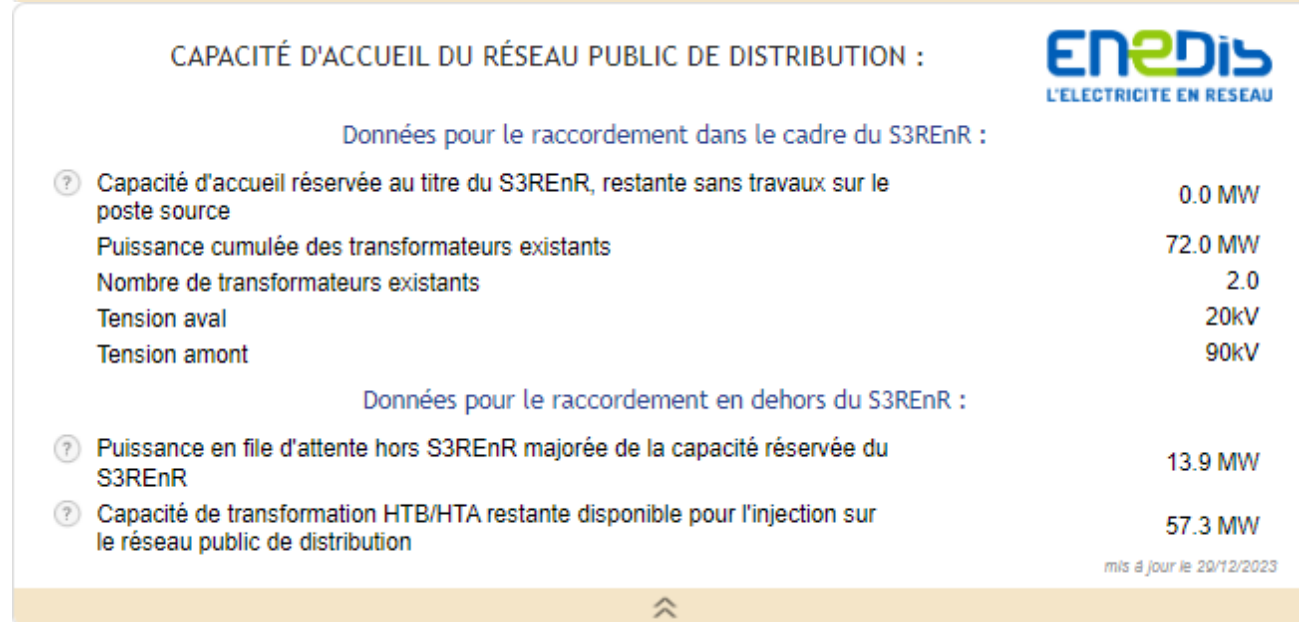
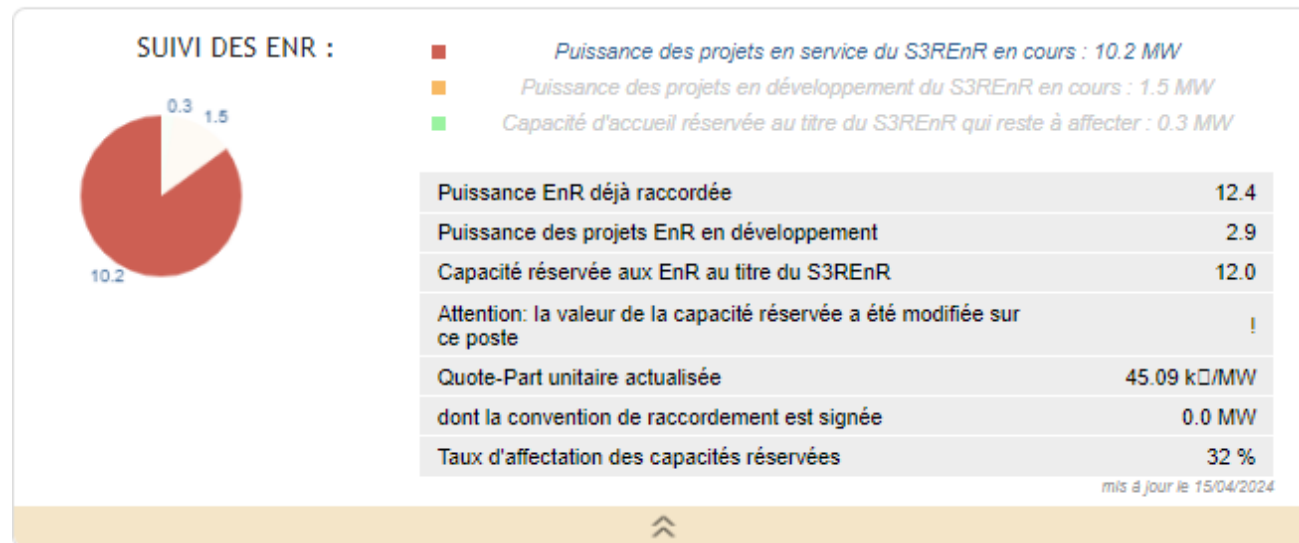
million people
supplied with
electricity

2,6

tera watt hours
of power generation



Ce poste est dans la commune de SAINT-CALAIS, au S3REnR PAYS-DE-LA-LOIRE (Coordonnées : 530459.06 ; 6759970.5)



Source : www.capareseau.fr

Experience feedback about grid connection

Resources provided by the Grid Operators (ENEDIS / RTE)

- CAPARESEAU
 - Source sub station information
 - Capacity already connected, queued and available
 - Public distribution network capacity
 - Infrastructures (transformers)
- Grid Capacity Mapping
 - Public distribution network mapping
 - Estimation of available capacity for MV or LV connection

Experience feedback about grid connection

Grid connection information by project stage

- **IPR – Grid Project Impact (*Impact Projet Réseau*)**
 - For early-stage projects
 - New service (since 2023)
 - Estimation connection route and costs
 - Price : Around 1400 €
- **DAR – Early-stage connection request (*Demande Anticipée de Raccordement*)**
 - For advanced stage projects
 - Same information as for an interconnexion request (*PRAQ*)
 - Response time to the interconnection request reduced to 1 month
 - Price : Around 4000 €
- **Interconnection request (*Demande de Raccordement*)**
 - Only for permitted projects
 - Response time : 3 month
 - Free

Experience feedback about grid connection

Grid Capacity



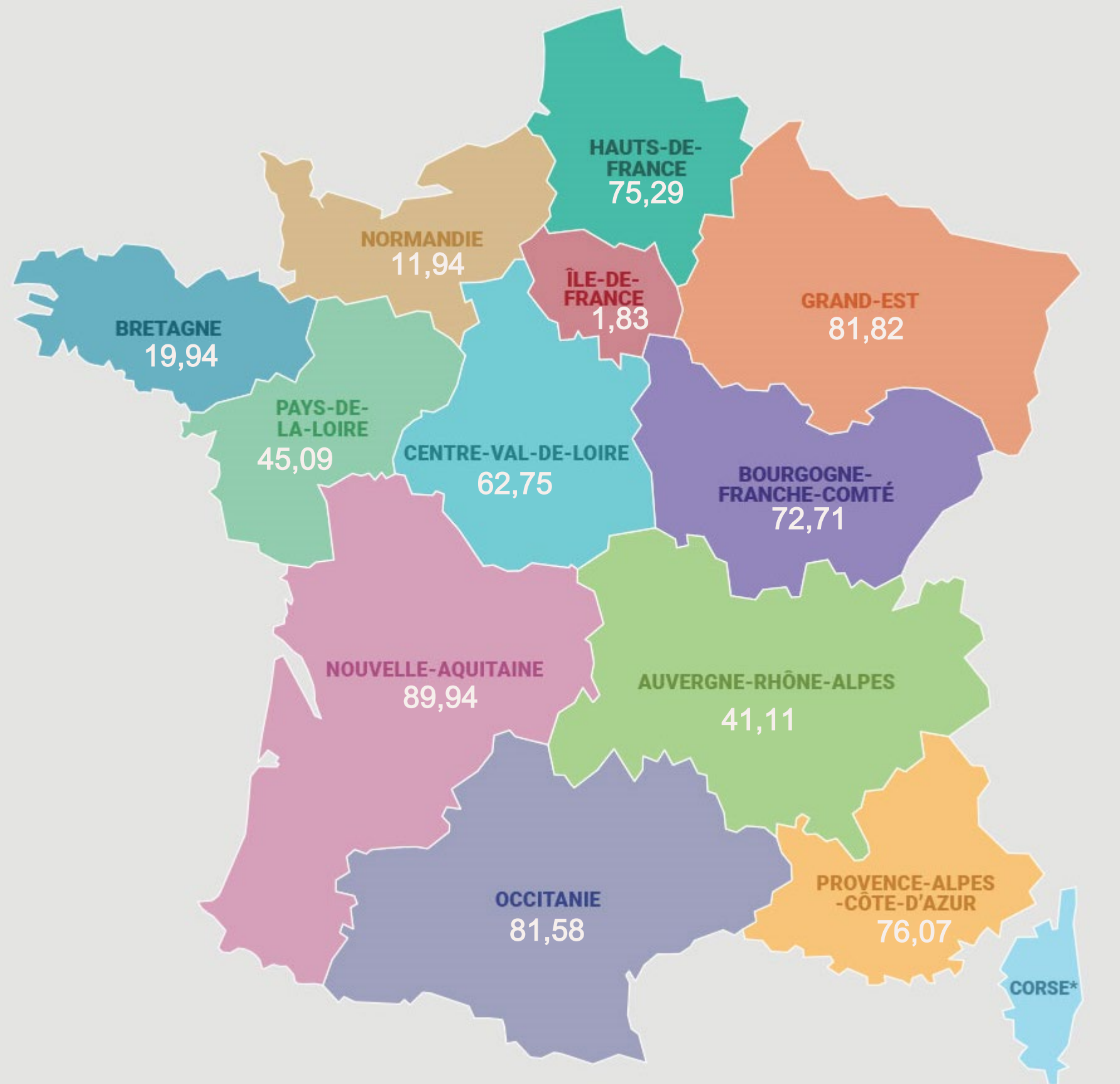
Experience feedback about grid connection

Grid connection : Timeline challenges

- Timeline ENEDIS :
 - 3 months → Technical and financial proposal (*Proposition Technique et Financière*)
 - 9 months → Connection Agreement (*Convention de Raccordement*)
 - 6 - 24 months → Electrical work

Experience feedback about grid connection

Grid connection costs



Source : www.capareseau.fr

- Grid connection share
 - Average for metropolitan France (excluding Corsica) 2021 : 29,30 k€ / MW
 - Average for metropolitan France (excluding Corsica) 2024 : 55,01 k€ / MW
- Electrical work costs
 - Around 50 – 100 k€ / km since 2019
 - Around 110-150 k€ in 2023-2024
- Larger share of grid connection costs in business plans

Experience feedback about grid connection

Grid connection possibilities

- Coupling photovoltaic and wind power
 - i.e : Reflex Project (ENEDIS)
- Storage
- Construction of private source substations
- Strengthening identification of future power capacity and adapting the regional interconnection plans
 - i.e : AERO (RTE)



Thank you for your attention !

Conference OFATE – Integration of renewable energy production into the electrical grid



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