

France • Renewable energy • Wind, Solar, Marine, Hydrogen

Gross electricity generation from renewable sources by 2021, TWh (%):



Total: 122.38 (100)

Source: Renewable Energy Statistics 2023 © IRENA
*excluding pumped storage

Major Compressed Hydrogen Plants:

- 1 Lavera, Air Liquide
- 2 Port Jerome, Air Liquide
- 3 Chalampé, Linde
- 4 Saint Fons, Air Liquide
- 5 Le Pont de Claix, Air Liquide
- 6 Isbergues, Air Liquide
- 7 Lacq, Air Liquide
- 8 Fos, Aga
- 9 Gueugnon, Air Liquide
- 10 Dunkerque, Air Liquide
- 11 Mulhouse, Linde
- 12 Pont de Metz, Oxygene de Picardie

Major wind turbines production factories:

- 1 Saint-Nazaire, Alstom (offshore nacelles & generators)
- 2 Cherbourg, Alstom (offshore blades & towers)
- 3 Béziers, Vergnet (blades & towers)
- 4 Longueil-Sainte-Marie (Oise), Enercon (towers)

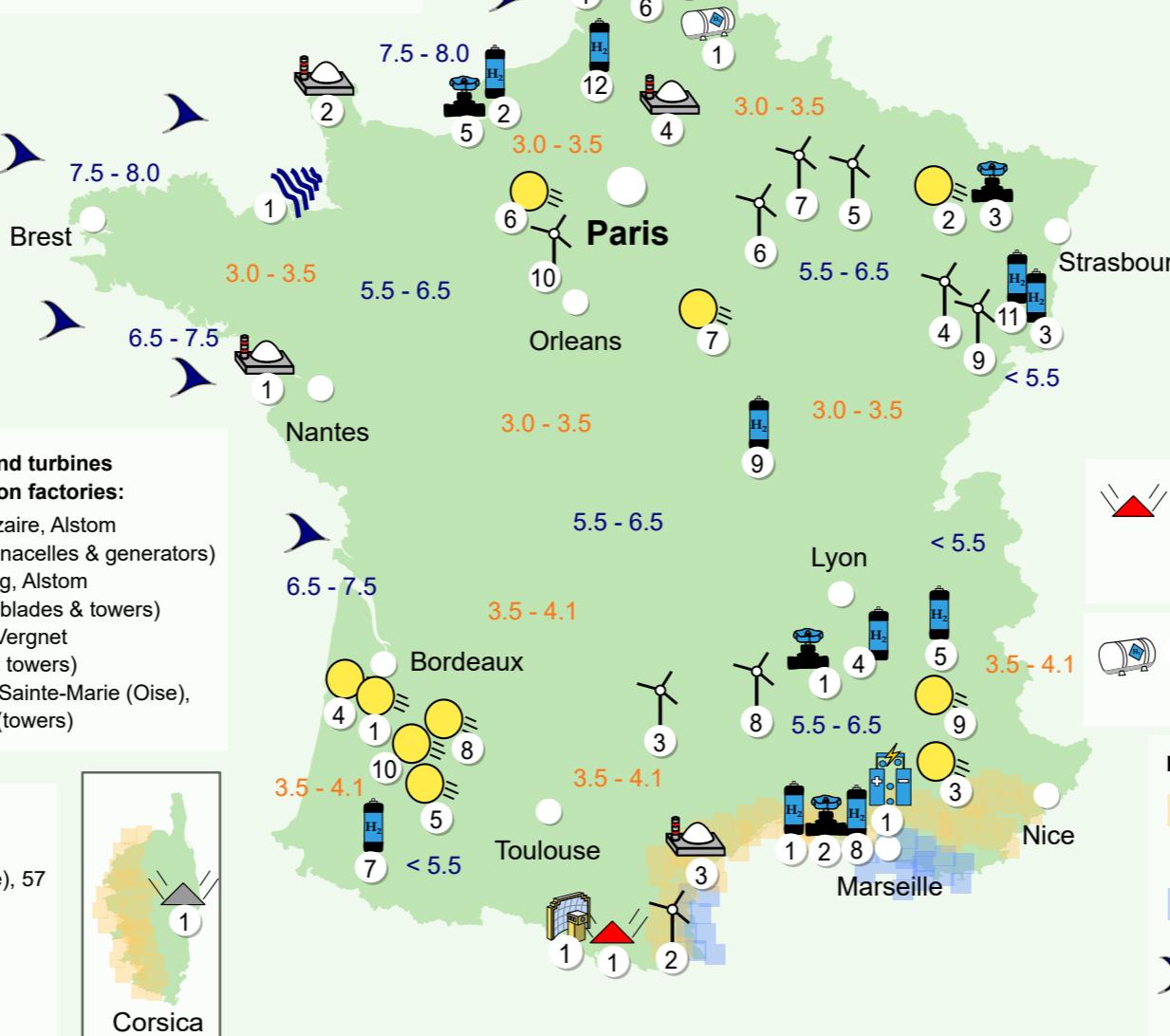
Hydrogen pipelines, km:

- 1 France Centre East (Feyzin, Rhone - Roussillon, Isere), 57
- 2 France South East (Lavera - Fos-sur-Mer), 42
- 3 France East (Moselle), 37
- 4 Dunkerque, 14
- 5 Le Havre, 4

Hydrogen fueling stations:

According to available data for March 2019, France had 9 operational hydrogen fueling stations.

Source: H2 Tools



Wind power plants over 60 MW:

- 1 Fruges, 140.0
- 2 Ensemble Eolien Catalan, 96.0
- 3 Levezou Salles-Curran, 87.0
- 4 Rougemont 1-2, 80.6
- 5 Les Hauts-Pays, 80.0
- 6 Seine Rive-Gauche Nord & Sud, 77.0
- 7 Germinon-Vélye, 75.0
- 8 Montagne Ardéchoise, 66.5
- 9 Lomont / Pays de Montbeliard, 63.0
- 10 Cormainville, 60.0

CSP Linear fresnel type with thermal storage plants over 1 MW, MW:

- 1 Alba Nova 1, 12*

* under construction

Solar PV power plants over 20 MWe, MWe:

- 1 Cestas, 300.0
- 2 Toul-Rosieres, 115.0
- 3 Les Mees, 100.0
- 4 Arcas, 83.5
- 5 Gabardan (Losse), 67.5
- 6 Crucey, 60.0
- 7 Massangis, 56.0
- 8 Pompigne, 40.0
- 9 Curbans, 33.0
- 10 Saint-Symphorien (Gironde), 24.0

Tidal power plants over 1 MW, MW:

- 1 La Rance, 240

0.0 kWh/m²/d Global Horizontal Irradiation (GHI)

0.0 m/s Wind speed

List of some largest electrolysis plants, power-to-gas, energy storage and gas into the natural gas grid projects, MW:

- 1 Jupiter-1000 Demo, Fos-sur-Mer, 1.0